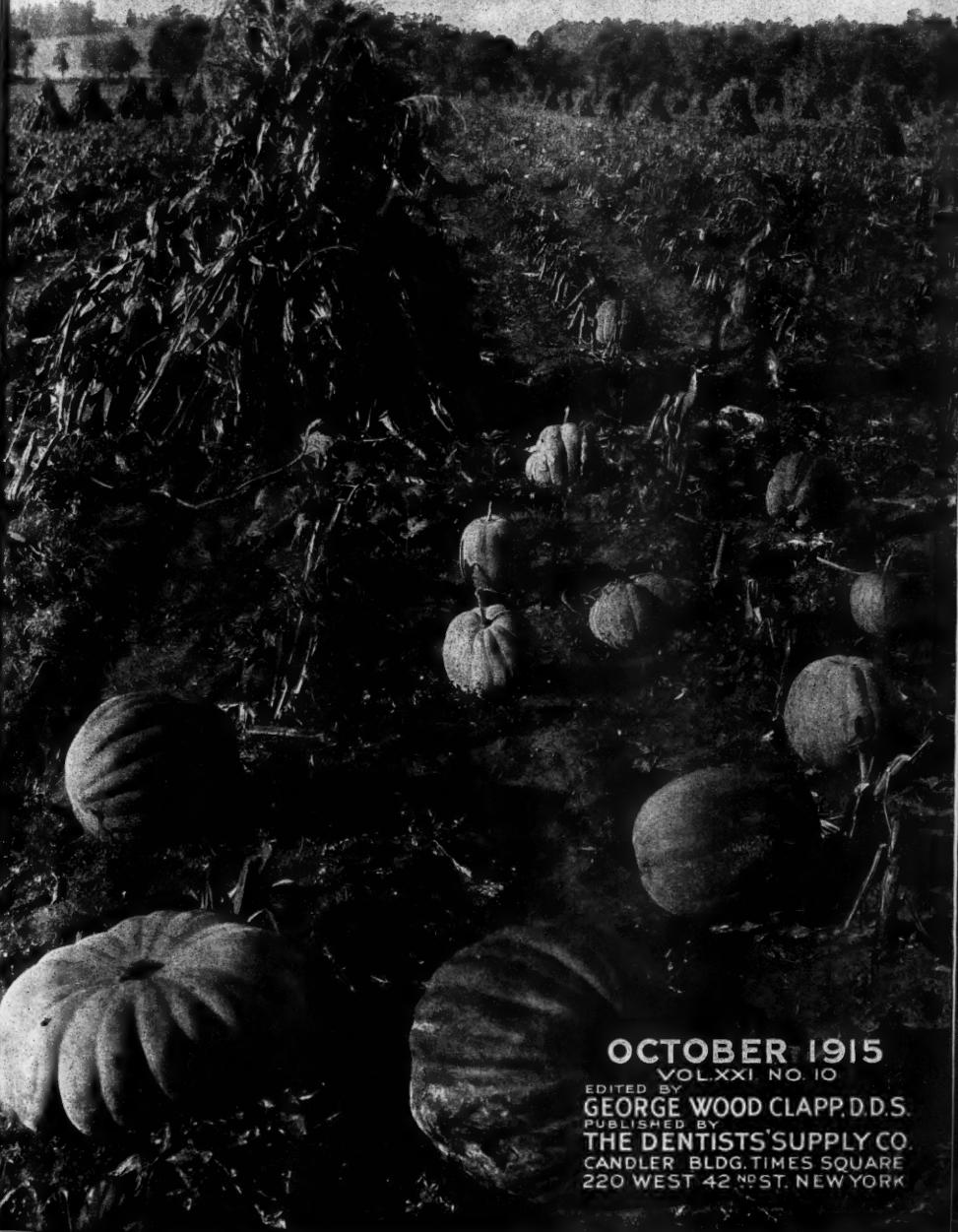


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OCTOBER 1915

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THE DENTAL DIGEST

GEORGE WOOD CLAPP, D.D.S., Editor

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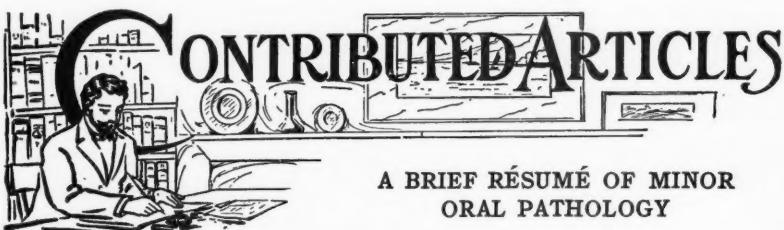
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Vol. XXI

OCTOBER, 1915

No. 10



A BRIEF RÉSUMÉ OF MINOR ORAL PATHOLOGY

BY JOSEPH HERBERT KAUFFMANN, D.D.S., NEW YORK

Dental Surgeon to the Bronx Hospital Dispensary and Dental Clinical Assistant, Vanderbilt Clinic of the Roosevelt Hospital

When one considers that the pathology of the maxillæ and their contiguous tissues almost invariably, especially when of dental origin, interests and demands the attention of the average dentist, some observations on this subject are always appropriate, our object being to refresh our minds with a brief review of some of those conditions likely to confront us and demand our diagnosis and treatment. To comprehend however in even a brief manner the pathology of the maxillæ and their contiguous tissues, we must bear in mind as a preface, important characteristics of these structures from a physiological and anatomical basis and besides have at least a reading knowledge of general pathology.

Assuming then, that we are so informed upon the subjects mentioned, we will cite a few cases occurring during the course of the writer's practice, and which might similarly arise in any practitioner's office.

Case 1. The patient, a woman, presented with three abscessed superior left first molar roots, which in the process of my work upon her mouth, I decided to remove for hygienic purposes. After removing the mesio-

buccal root without trouble, I next attempted to extract the other two roots which were still united and after an unusual amount of pressure was exerted, I succeeded in extracting them, while at the same time I noticed a trickling of blood from the left nostril. I hastily diagnosed the traumatism as a perforation of the left antrum and upon examining the extracted roots found a fairly large piece of alveolar process adherent thereto. The antrum had been perforated, its inferior wall ruptured with a consequent outflow of blood through the middle meatus into the left nasal cavity.

Treatment. I first applied a weak solution of boracic acid into the alveolus by syringing, and plugged the left nostril for a few minutes with adrenalin chloride solution 1-1000, which soon relieved the epistaxis. I then packed a 1-5000 bichloride solution well up into the alveolus for antisepsis, and at the same time to establish a drain in case infection resulted, as otherwise treatment would be difficult. The small sinus having a tendency to close up, I directed the patient to use a strong solution of listerine hourly at home as a mouth wash. The next day the tissues over the antrum presented marked inflammation with much pain and a rose-red color externally, typical of antral inflammation.

I used a dressing of 5 per cent. iodoform gauze with boracic acid, after swabbing the socket with iodine, not caring to further use any powerful and easily absorbed drug as bichloride of mercury. After treatment for two weeks, symptoms gradually subsided.

Case II. This was a very minor, but peculiar case indeed. The patient, a boy of 13, presented with an exposure of the pulp in the lower right first molar, which tooth was badly decayed, as is often seen. I applied arsenic fibre, covered with cotton and cement and told the patient to return the next day. When he did, I noticed on the extreme right border of the dorsum of the tongue a raw deep-red excavated ulceration of the mucous membrane about one fourth of an inch in diameter and questioned him regarding the lesion. In reply, however, he only said that when he awoke in the morning he felt a burning sensation at that situation, but that otherwise there was no untoward symptom. I did not suspect arsenical poisoning in any form at first, but upon looking closely at the tooth containing the arsenic, I noticed a small opening in the lingual wall, which being frail had crumbled away under pressure of mastication after I had last seen him. The arsenic having been placed close to it had oozed through the opening and as his tongue lay against his tooth while sleeping, a gradual gangrene ensued at that point of contact, without having destroyed any other portion of the mucous membrane of the gum.

Treatment. This was to curette off the sloughed area so as to limit the further penetration of the arsenic and to paint with tincture of iodine,

covered by balsam of Peru as a healing protective, after which the lesion healed.

Case III. While not an unusual case, this one was indicative of the result of neglected treatment following an incomplete extraction operation and which sometimes may result seriously. The patient, a man about 30, presented with an abscessed superior first right bicuspide next to which was a patulous area of gum tissue over the cuspid region. He wore an upper vulcanite denture, carrying among others a cuspid tooth, which rested upon the patulous area. Upon questioning him he told me that the bicuspide had been under treatment for a decomposed pulp and com-



Radiograph of superior right cuspid root giving rise to palatal abscess

plained of severe pain in this region. At the same time, after applying formocresol to the pulp chamber, I noticed the previously mentioned raw and notched surface of the mucous membrane at the right canine fossa (he having of course removed the plate) and upon probing found a dense substance within the fistulous opening. I suspected the remains of the cuspid tooth (the extraction of which was undertaken several years previously) and advised a radiograph.

Treatment. The next day the patient returned with a highly inflamed hard palate directly behind the fistulous opening and a well-defined abscessed area, which being painful, I opened, drained the abscessed cavity with boracic acid and advised an antiseptic mouth wash for continual use. Upon receiving the radiograph, there was revealed a tortuous apical third of the cuspid root, a well drawn out fistula from its

apical end to the middle of the palate and what seemed a fair amount of necrosis in the region of the bicuspid, evidently the result of the chronic abscessed condition of the cuspid. I advised the immediate removal of the latter. The patient was given a tablet of bromural and told to take it one half hour before visiting me the next morning. This he did and I proceeded by means of novocain infiltration anaesthesia to remove the root. After a half hour's work, with some pain toward the end of the operation, greatly augmented by the patient's deplorable psychic condition, this was accomplished, besides the removal of a small amount of necrosed bone leaving a deep gap in the alveolus. Next I washed out the wound with 2 per cent. phenol solution, followed by tincture of iodine, after which I inserted 5 per cent. iodoform gauze saturated with boracic acid solution. For the next few days his tissues were greatly inflamed, due to the severe instrumentation, which, however, subsided with the exhibition of antiseptic mouth wash and *cold* applications externally.

During the operation, I noticed but a slight amount of necrosed bone, so that evidently the picture was somewhat deceptive in this respect, and as I saw the patient for some time later without any consequent abnormal developments in his mouth, I assumed that such was the case. The bicuspid I treated and filled, the abscess and fistula healed and the patient was extremely thankful.

Case IV. A child $2\frac{1}{2}$ years of age, presented, suffering with an abscessed area in the left superior central region and without that tooth in its normal position. Had been suffering for many days and the physician in whose charge it was, advised the extraction of the unerupted tooth, the incisal edge of which was barely visible.

Treatment. This I accomplished after considerable wrangling with the mere infant and succeeded in liberating a thick creamy pus. Upon inquiry, I found that the child had after birth acquired syphilis from its mother who previously had been infected by the father. Consequently its morbid syphilitic condition had influenced the eruptive process in such a manner as to make it react pathologically instead of normally, by reducing the vital activity of the tissues, thereby leaving them more easily undermined by the usual irritation of the eruptive process resulting in the abnormal developments previously mentioned.

Case V. A man, married, bartender by trade, presented with a swollen inferior right maxilla, otherwise healthy in appearance, and complaining of an uncomfortable feeling in this region. He said that he had previously been to a physician for treatment (having had no distinct toothache) and for a week previous to his visit had been using a salve externally without any relief. Upon examining all the teeth in his mouth upon the affected side, I noticed no carious or devitalized teeth or any-

thing else abnormal within his oral cavity as far as objective symptoms were concerned. Upon palpation, I found the swelling to be of a glandular type and I then questioned him in regard to a small patulous red sore, centrally placed on his upper lip. He had had it about three weeks.

Treatment. I tentatively diagnosed syphilis, not being sure however, because the submaxillary glandular concomitant infection could have been caused by some other obscure condition. Later my diagnosis was confirmed by a blood test and antisiphilitic treatment instituted. It developed later that the lesion was the result of infection from another man who had given him a glass of liquor to drink from, after first having had it in his own mouth. This is a case which may often catch us off our guard unless very careful because the initial lesion while present was not as distinct as when first present and not as easily diagnosed as some of our diagrammatic text-book pictures would make it appear. Suspicious lesion such as this should arouse attention, especially when no oral defect is present and the regional lymphatics or pilot glands are involved.

Case VI. As an example of an emergency measure occurring in every practitioner's office, I might mention the old story of secondary hemorrhage. A man, who had lost considerable blood through a lacerating operation for the extraction of a lower second left molar, came to me after his dentist and physician had failed to stop the bleeding, the operation having occurred two days previous.

Treatment. I first cleansed the socket and then warmed up some modeling compound. Next I packed into the socket a tampon of adrenalin chloride 1-1000 and on this conformed the warmed compound by having him press with his upper teeth into that substance thereby automatically covering the alveolus in the form of a saddle and providing a temporary splint, in whose upper part his superior teeth occluded. This served to keep the adrenalin in place, the socket closed and established mechanical pressure upon the oozing capillaries thereby hastening coagulation. Furthermore I prescribed as follows:

R_x Calcium Lactate $\frac{3}{2}$ j
Syrup Aromat. $\frac{3}{2}$ j
Aquaee Destill. $\frac{3}{2}$ iiij

Sig. Tablespoonful every hour until bleeding stops.

Theoretically, at least, the calcium lactate acts as a factor in hastening coagulation and clinically has often proven successful.

In conclusion, I think that if every man will use a little care in ascertaining a correct diagnosis of these minor but disagreeable conditions and supplement this by the exhibition of basic surgical and therapeutical principles, he will only need the courage of his convictions to successfully deal with such occurrences, thereby earning the thanks of the patient and avoiding the shifting of responsibility upon the shoulders of others.

GREENE VARDIMAN BLACK, M.D., D.D.S., Sc.D., LL.D.
1836-1915

A great man is dead. He was great because he served greatly. He kept his own needs simple and let his wealth of production flow out to enrich others. He took life seriously enough to devote it to great purposes and constructive work, but he did not take himself seriously enough to be greatly concerned about his own material enrichment. He understood that "the things that are not seen" are eternal.

There are two ways of looking at his death. We may bemoan our loss as one that cannot be repaired, or we may view it as the stopping of a mortal life which has done its work and provided for its own replacement. For Doctor Black's life has been an inspiration to many lives that are now in full flower, and to many that are yet young saplings and will grow into sturdy oaks. Young men grow up about such a man as young shoots spring up where fertile seeds from an older tree fall.

I never had the pleasure of Doctor Black's acquaintance in any such degree as I wished. When I practised in a town so small he never heard of it, I followed his contributions to our literature and served my patients better for it. And since I have delved in broader fields, many a weary hour has been strengthened by the thoughts of him and a few others, who are, to my mind, "the grand old men" of the profession.

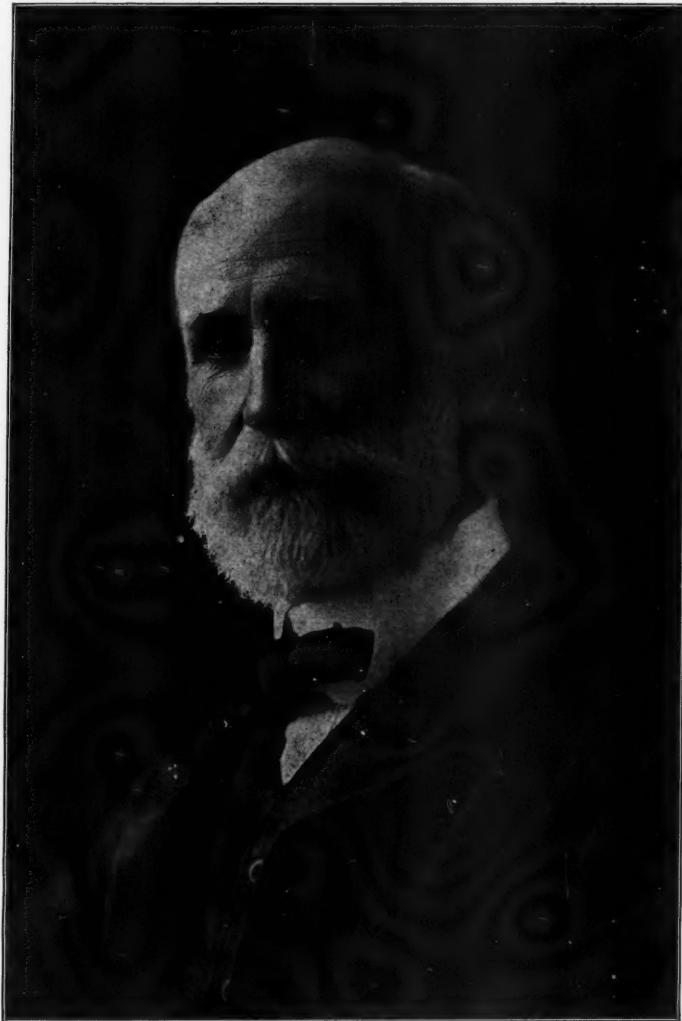
Doctor Black's person and presence are gone from us but his work endures, and reflections of his spirit will shine out in thousands of communities as long as those who are born of his spirit, serve.

It will be monument enough and memory enough for any of us, if, when lifework is done, some think of us as many think of him.

GEORGE WOOD CLAPP

After seventy-nine years of life, Dr. G. V. Black died of pernicious anemia at his boyhood home, Cass County, Illinois, August 31, 1915. To this home Dr. Black's parents moved when he was 9 years old. Around it most of his boyhood memories clustered. From it he went to the three months' winter term of the country school, and when after a long life of achievements and honor, he sickened unto death, he expressed a wish to close his days there, and there he died.

While Dr. Black's work is interwoven into the warp and woof of dental progress everywhere, the scene of his work was never far from the old home. He studied medicine in Illinois from 1853 to 1856, studied dentistry in Illinois in 1857 and practised in Winchester, from 1858 to 1862; enlisted in the 129th Illinois Volunteers; returned to Illinois and practised in Jacksonville from 1867 to 1894, and from there moved forward in ever widening lines of work and influence until his life closed in Illinois last August. The following summary of his activities, reproduced from the *Dental Review* by the kindness of Dr. C. N. Johnson, gives the more prominent points in his activities. A list of his contribu-



GREEENE VARDIMAN BLACK, M.D., D.D.S., ScD., LL.D.

Born 1836 — Died August 31, 1915

tions to the literature of the professions may be found in the *Dental Review* of March 1910, where it fills 14 pages in small type.

LEADING EVENTS IN THE LIFE OF DR. BLACK.

D. D. S., Missouri Dental College, 1877.
 M. D., Chicago Medical College, 1884.
 Sc. D., Illinois College, 1892.
 LL. D., Northwestern University, 1898.

Born near Winchester, Scott County, Illinois, August 3, 1836.
 Family moved to farm seven miles southeast of Virginia, in Cass County, Illinois, in 1845.
 Attended country school about three months each winter.
 Studied medicine with Dr. Thomas G. Black, a brother, at Clayton, Ill., 1853-1856.
 Studied dentistry with Dr. J. C. Speer, Mt. Sterling, Ill., 1857.
 Practised dentistry at Winchester, Ill., 1858-1862.
 Enlisted in 120th Illinois Volunteers, 1862.
 In hospital at Louisville, Ky., six months, and discharged for disability, 1863.
 Practised dentistry in Jacksonville, Ill., 1864-1897.
 Joined Missouri State Dental Society, 1866.
 Joined Illinois State Dental Society, 1868.
 First important dental paper on "Gold Foil" read before Illinois State Dental Society, 1869.
 President Illinois State Dental Society, 1870-71.
 Invented one of the first cord driven, foot power, dental engines, 1870.
 Lectured on pathology, histology, and operative dentistry, Missouri Dental College, 1870-1880.
 First president of the Illinois State Board of Dental Examiners, 1881-1887.
 Wrote book, "The Formation of Poisons by Micro-organisms," 1884.
 Professor of Dental Pathology, Chicago College of Dental Surgery, 1883-1889.
 Introduced teaching of Dental Technics, Chicago College of Dental Surgery, 1887.
 Wrote for the American System of Dentistry, chapters on "General Pathology," "Dental Caries," "Pathology of the Dental Pulp" and "Diseases of the Peridental Membrane," 1886.
 Wrote book "Periosteum and Peridental Membrane," 1887.
 Voted life membership in Illinois State Dental Society, 1889.
 Professor Dental Pathology and Bacteriology, Dental Department, University of Iowa, 1890-91.
 Wrote book, "Descriptive Anatomy of the Human Teeth," 1891.
 Wrote series of articles entitled, "The Management of Enamel Margins," *Dental Cosmos*, 1891.
 Professor Dental Pathology and Bacteriology, Northwestern University Dental School, 1891-1897.
 Chairman Section on Etiology, Pathology and Bacteriology, World's Columbian Dental Congress, 1893.
 Report on Dental Nomenclature, World's Columbian Dental Congress, 1893.
 Wrote series of articles entitled "An Investigation of the Physical Characters of the Human Teeth in Relation to Their Diseases and to Practical Dental Operations, Together with the Physical Characters of Filling Materials," *Dental Cosmos*, 1895-96.
 Dean and Professor of Operative Dentistry, Dental Pathology and Bacteriology, Northwestern University Dental School, 1897.
 President, National School of Dental Technics, 1897.
 President, National Dental Association, 1900.
 Awarded First Fellowship Medal, by the Dental Society of the State of New York, 1905.
 Special Guest at Annual Meeting of American Dental Society of Europe, 1906.
 Wrote Work on "Operative Dentistry," in two volumes, 1908.*

It is the testimony of those who knew Dr. Black well that the dominating motive of his life was devotion to truth. Against it he had no theories that had to be sustained. From its track he cared not to depart. Wherever it beckoned he followed, and though he tore down to-day all that he had finished yesterday, and might have to again tear it down to-morrow and set about building it differently, he knew neither fear nor hesitation. The thing he feared most was being untrue to truth. The

charge of inconsistency never scared him. He was like that great teacher who said "To-day I think thus; tomorrow I may think just the opposite."

This is the spirit that fires great souls. It is the spirit that spreads from them to others also struggling for truth, and supports them to oppose those in authority. Dr. Williams gives a fine illustration of this quality of Dr. Black, in telling how, when Dr. Williams had painstakingly worked out new theories concerning the causes of decay, and had journeyed from London to present them to a rather hostile audience in New York, Dr. Black, moved by the conviction that Dr. Williams was right, journeyed all the way from Chicago to New York to support the new views, presented by one who was to him personally almost unknown, but who was a fellow servant of the truth.

Dr. Black's contributions to the development of the profession have been extensive and important. He has done great work in hewing the accretions of tradition from the live tree of truth, in freeing our practice from empiricism, and making it scientific. But great as have been these contributions, it is probable that his contributions to the spirit of men have been greater. And when men who sought truth grew tired of the long task, when what little they could do seemed not worth the years of endeavor and the thousand times repeated failure, the spectacle of this grand old man, plodding serenely along at his tasks, unhesitating but unfearing, has heartened them and they too have brought forth good works, not alone because they loved truth, but because this man loved it also and served it, and drew from it inspiration and strength.

Dr. Black's life was well balanced. He knew something besides dentistry. He was at home in the woods and fields, in the forest, on the waters, everywhere in contact with Nature. From Nature he probably learned, as they say all her lovers do, something of her patience and perseverance. On some of these outings important mental work was done. While his body drank in oxygen, his subconscious mind mulled away at the things that were later to rise above the threshold of consciousness and appear as contributions to some form of science.

Those to whom Dr. Black were personally near and dear may well feel keen sorrow at his departure, but for those of us who knew him in a less intimate way, another attitude is more fitting. We may well pause long enough to do his spirit honor, and to feel a thrill of pride that our profession has benefited by so great a man, and that it will long feel the legacy of his deeds and motives.

And we can do him no better honor than to wish that they upon whom his mantle falls may be truly his intellectual and spiritual descendants.

THE AGE OF THE DENTIST

BY ELBERT HUBBARD, M.A., EAST AURORA, N. Y.

Honorary Member of the International Dental Society

Elbert Hubbard wrote this article especially for this magazine.—Editor.

A doctor of Dentistry is a person who gives his time and attention to the care of the teeth—let us have no argument on that. The term “doctor” comes from the Latin *docere*, to teach. “Docent” means teacher. “Docile” means that which is teachable, amenable, pliant, receptive.

The good doctor was not only a teacher, but a pupil, a learner, and so was spoken of by Erasmus as “docile.” A “document” is an authoritative written statement, formulated by a doctor.

A “doctrine” is the thing taught by a doctor.

Erasmus lived at that wonderful time known to us as the “Italian Renaissance.” That epoch-making period groups itself around the unforgettable year of 1492, when the world awoke from its sleep of a thousand years. During that thousand years, called the Dark Ages, the world did not produce a single man of initiative—not an orator, not a painter, not a sculptor, not a poet, not a navigator, not a scientist.

There was a penalty on investigation, and originality was regarded as a crime. It was a time of authority—of laws, codes, creeds, and precedents. The world looked backward for truth, not forward to the sun-rising.

Erasmus made pilgrimages to all of the chief universities of the world. He got the travel-habit from being secretary to a bishop, who was a “docent,” as most bishops were. Those two rode horseback through Holland, France, and Italy, visiting the nunneries and monasteries, which were the first schools and universities.

The word “college” means a collection of people living in one big house for the purpose of study.

Erasmus rode ten paces behind his worthy superior, the bishop, but when they arrived, his beauty, wit, and learning made him an easy favorite with the monks. Also, the nuns. He was “private-docent” and later became a “traveling docent” or parapaticetic doctor: that is, a teacher. Most of the teaching then was done by these “doctors” who went from place to place. The doctor’s diploma duly engraved on parchment, after the quaint and artistic method of the monks was something of which to be proud, so the owner carried it with him wherever he went, ready at all times to produce it if the wind was East. Just here seems a good place to say that Erasmus invented the slang phrase “to doctor,” which meant to muddle, confuse, dilute, adulterate.

In Paris they called Erasmus Maistre. In Berlin, Meistro; in Florence, Doctor; in Amsterdam, Master; in Palestine, Rabbi.

In all universities at that time there was just one degree given, and that was the title of Doctor, meaning teacher. And in fact, the first and only intent of education was to fit a man to teach.

It was a hundred years and more before specialization made it necessary to limit the doctor's degree to one of three things—D. D., Doctor of Divinity; LL.D., Doctor of Laws; M.D., Doctor of Medicines.

For a man to call himself a doctor is a very modern innovation. He might use the letters after his name, tokening his degree, but this was as far as his modesty would allow; but the term itself, like that of "Master," was one of compliment, deep respect, or half adoration bestowed by others.

The advance in civilization has brought us a great division of labor. Harvard University now issues a score and more of degrees, for as many lines of human art and endeavor.

The degree of D.D.S., or Doctor of Dental Surgery, comes in practically within the last fifty years.

Just how and why the word "Doctor" was appropriated by physicians and became synonymous with the word "Leech," and finally ousted it, is difficult to trace.* It is an Americanism which has now traveled across the sea and is getting a foothold in Europe. But in the strict sense no profession is entitled to its exclusive use; and one thing is quite true, it has lost its original quality of deep respect, and is abbreviated by the merry villager into plain "Doc," as he calls in Jeffersonian simplicity to his friend and neighbor across the street.

The first Dental College founded in the world was the Baltimore College of Dental Surgery, in 1839. Next followed the Ohio College of Dental Surgery in 1845. The Philadelphia Dental College was chartered in 1863, but practically, the entire science and art of dentistry has evolved since the Civil War.

Just here comes in an interesting fact to the effect that the Insurance Actuaries representing the "Big Five" life insurance companies have increased the probable length of adult life six years since dentistry came into vogue. And fully granting that because a thing goes with a thing is no reason the thing is the cause of the thing, yet my opinion is that modern dentistry has done more than any other one factor in adding to human efficiency. And all that adds to human comfort and efficiency.

One of the leading Insurance Societies has done business so closely and well that for the year 1909, whereas they had figured to pay one hundred losses, yet but sixty-one out of a hundred scheduled to die, did.

*A most interesting account concerning the name "Doctor," and "Leech" may be found in the "Annals of the Barber-Surgeons of London," compiled by Sidney Young, London, 1890.—*Editor.*

This gain means just one thing, and that is that people are learning how to live. And in this American Renaissance, I repeat, the Doctor of Dentistry is playing a big part.

In all specialties there is danger of limiting the intellectual horizon.

But beautiful, needful, and beneficent as is the work of the dentist, if he does not get out and away from his office for several hours a day he will probably get fussy, finicky, and foolish, where he should be big, broad, and generous.

One of the best recipes for keeping mentally poised is to give away your knowledge. That is, be a "Doctor," indeed—be a teacher.

Every superior dentist is working all the time to destroy his business. That is, he is showing his patient how to do without him. Don't be afraid to talk to the party in the chair. I know a woman who left a good dentist and went to another because the first one wasn't a good talker.

Let the dentist have no fears that he will ever succeed in destroying his business by educating the patient. The actual fact is, the higher the intelligence of your clientèle, the more they understand Oral Righteousness; the more they will come to you, and the more willing they will be to pay you.

That Chicago dentist who received a check for ten thousand dollars for one job, got the money not only because he did a splendid, good piece of work, but because he had taught the whole family, incidentally and quietly, the science of Oral Hygiene.

Now ten thousand dollars in itself isn't much, yet of course we all know a few dentists who haven't ten thousand dollars in the bank. However, all good dentists should have, and some day will. But the point is this, that ten thousand dollars represented the measure of gratitude. The dentist had won.

I went to see him just to find for myself what manner of man he was. At first he refused to either affirm or deny the report. He was not adverse to advertising, any more than Dr. Evans was when he filled the teeth of royalty; but this dentist didn't want to be known as "That ten thousand dollar beauty."

I saw at once that the man got out of his office for several hours daily. He had helpers who did a deal of the drudgery. He was healthy, happy, industrious, and was a man to win your admiration and confidence.

He was a big man first, and next he was a Doctor of Dental Surgery. He spoke well of his competitors—well of everybody.

He belongs to the Societies—attends the meetings, takes part in the discussions, and keeps abreast of the times all along the route.

He is proud of his profession; realizes that he is of value to the com-

munity; and so has that self-respect which gives self-reliance and attracts friends.

Let no dentist take the creepy, apologetic mental attitude. He is as good as the best and should feel it from cerebrum to the flanges of his pedals.

He need not be dictatorial, dogmatic, nor opinionated, but let him feel that he is in a business which is adding vastly to the efficiency of the race. He is a business man, an artist, a chemist and he belongs to a great profession. Of all men the dentist is a producer and a creator.

With only about five per cent. or less, of the population receiving proper dental care, no dentist need fear cutting off his business by being a teacher of Oral Righteousness. This always and forever should be his theme.

He should not be owned by the Dental Societies, nor even by his profession. He is a man first.

Dentistry is a profession, it is a business. When your rent comes due, or you want a new set of antiseptic furniture—so as to better impress your Clientèle—you have to draw the check yourself.

Live your life, do your work, be true to your patients, and you will have the self-respect that makes you a factor for good in the Dental Society.

But the man who is owned body and boots by the Society isn't either much of a man or much of a dentist. If the President of your Society tries to read you the riot act, refer him to Lincoln's Emancipation Proclamation and the Fourteenth Amendment to the Constitution.

This has been called "The Age of Electricity," "The Age of Concrete," "The Age of Auto," "The Age of the Farmer," but I like to think of it as "The Age of the Dentist."

Oral Righteousness just now is the coming theme, and opportunity for the dentist is at the door.

THE PROSTHETIC PRIZE ARTICLES

Decision as to the prizes has been delayed by Dr. Williams' absence at the International Dental Congress, and his ill health, but he is now working on them.

There is a great number of these articles and they require careful reading.

THE EDITOR

FILIPINO HOME-MADE TOOTHBRUSHES

By MONROE WOOLLEY, D.D.S., FORT CASEY, WASHINGTON

The Filipinos did not wait for the arrival of the Americans, as overlords, to bring them toothbrushes and teeth cleaning material. Although the Spaniards, and other foreigners doing business in the islands, imported dental supplies, chiefly toothbrushes, and tooth powders and pastes, the peasantry found such things luxuries. The price was prohibitive to them, so they called upon nature to supply them with teeth-preserving implements.

Perhaps no race of people anywhere is prouder of sets of solid, shining teeth than the Filipinos.

For a toothbrush, and for tooth paste too, the peasantry go to the betel nut tree. Those of them who can't afford anything better still cling to the old fashioned methods. The shell surrounding the nut is worked into a toothbrush, it being peculiarly fitted for this purpose. A quarter of the shell is used, and thus one shell will make four or more toothbrushes, depending upon the size of the nut. That part of the shell next to where the stem of the nut protrudes is thickest. It is this portion which forms the brush. The inside is covered with a coating of stiff bristles. The opposite end of the piece of shell is trimmed down to a tapering point to form a handle. In this way nature produces toothbrushes for the peasantry.

For a paste to cleanse the teeth betel nuts are burned to ashes. This forms a serviceable paste when mixed with a few drops of water. Cigar ashes are used in the same way when betel nut ashes are not available. Betel nut ash-paste lacks the taste of a confectionary tid-bit, but it imparts to the teeth to a marked degree the perfume of the betel nut, and this is far from being unwholesome.

The natives also make temporary toothbrushes from twigs taken from guava trees. The end of the twig is beaten into a bristle-like mass and the teeth are rubbed with this. These brushes are too crude for home use, and they are used chiefly when the natives are away from home in localities where the betel nut brushes are not available.

Our own people have to be taught the proper way of brushing the teeth. Unless instructed by a dentist most Americans are prone to brush their teeth crosswise, instead of up and down. In remote regions of the Philippines natives may be seen practising the up-and-down motion as though guided by the discoveries of modern dentistry. Experience probably taught them the best way of cleaning. Certainly no dentist ever penetrated the jungles to preach this idea to them.

The Filipino peasantry has a habit of chewing green betel nut leaves mixed with a sprinkling of lime. This habit is something like the tobacco chewing habit, but natives say they chew the concoction as much for preserving the teeth as for any pleasure they derive from it. The juice smears the tongue and lips a bright red, while it makes the teeth glisten with whiteness. It is not an uncommon thing to find very aged people in the islands having perfect sets of teeth.

FLORIDA'S DENTAL LAW VALID

BY A. L. H. STREET, ST. PAUL, MINN.

In the recent case of *Noble vs. State*, 66 *Southern Reporter*, 153, the Supreme Court of Florida handed down a decision upholding the validity of the law of that state which makes it a misdemeanor, punishable by a fine of not more than \$1,000, or by imprisonment for not more than one year, or by both such fine and imprisonment, to practise dentistry before obtaining a certificate from the state board of dental examiners. It was argued in this case that the law was invalid as infringing the constitutional guaranty that "all men are equal before the law," in that regularly licensed physicians are permitted to extract teeth without obtaining the certificate required of dental surgeons. In refusing to adopt this argument the Supreme Court said:

If the organic declaration that "all men are equal before the law" is given the force of a guarantee of equal protection of the laws, it is not violated when a legislative regulation within the police power of the state is made applicable to all persons as a class who are similarly situated and conditioned with reference to the regulation, and the classification is not purely arbitrary. Whether the state has regulated other occupations is not material in determining the validity of this regulation. The statute is applicable to any person who shall practise dentistry or dental surgery in this state, thus making it operate alike on all persons who shall engage in the particular occupation. It does not impose unusual or unnecessary restrictions upon lawful occupations, or prescribe arbitrarily unreasonable conditions. In permitting licensed physicians and surgeons to extract teeth, the statute merely makes definite the classes of persons designed to be affected by its operation."

Who has never tasted what is bitter does not know what is sweet.
—*Exchange.*

MALPRACTICE BY DENTIST

(Missouri) The Missouri case of Young vs. Wolff recently decided by the Court of Appeals of that state presents a very interesting case involving the practice of dental surgery. The suit was one brought to recover damages accrued on account of personal injuries received through the alleged negligence of defendant.

Defendant was a dentist practising his profession in the city of St. Louis, and plaintiff was treated by him as his patient. The evidence proved that plaintiff called on defendant about the middle of December, 1910, for the purpose of having him treat her teeth. Defendant examined her teeth and went about the matter of killing the nerve in one before filling it. She returned on several different days to his office, and he administered treatment toward killing the nerve and took the nerve out. On December 24th, plaintiff claimed that defendant told her that three of her teeth had moved forward and it would be necessary to push them back. Thereupon he took an instrument with a couple of prongs and placed it between those teeth—that is, the first molar and the one in front—and wedged them back and put some cotton in between them. Plaintiff said that defendant pushed the three back teeth backward for as much as one-eighth of an inch or more all at one sitting and placed cotton between. Thereafter, on the 26th, plaintiff returned to defendant's office, and he inserted gutta-percha between the teeth, and inserted gutta-percha between the teeth a second time on December 27th in order to hold them thus separated, until on the 29th of December enough separation was established between the teeth to squirt a stream of water through. Thereupon defendant placed the same or similar apparatus between the teeth for the purpose of keeping the first molar tooth from moving forward, and then filled the first molar so as to prevent them from returning to the natural position. As a result of this treatment and while she was yet undergoing it, plaintiff says she began to suffer from a nervous affliction in the lower jaw which entailed not only great pain but a disfigurement upon her. It is said that the nerves in plaintiff's lower jaw and about it have become so affected that she can scarcely control it and she suffers a constant twitching thereabout.

On the part of defendant, the evidence was that he separated plaintiff's teeth in the ordinary manner, but only slightly so as to insert two thicknesses of rubber dam, and that such rubber dam is very thin—scarcely thicker than paper. Defendant positively asserted that he did not separate the teeth unduly, and that the separation was so slight he could not even estimate it except to say that it was an infinitesimal por-

tion of an inch. All of the experts—both for plaintiff and defendant—testified to the same effect that the treatment as described by defendant was entirely proper in every respect and such as is employed by a competent, skilful dentist in every case of the kind. Then, too, a number of witnesses, including defendant, said that plaintiff was suffering from the nervous twitching mentioned before defendant treated her at all.

In the St. Louis Circuit Court, where the case originated, the jury was instructed that if defendant unskillfully forced and held plaintiff's teeth apart and out of their proper position, and failed to exercise the skill usually exercised by reasonably skilful dentists, and plaintiff was injured thereby, the verdict must be for her.

Abiding by this instruction the jury brought in a verdict for the plaintiff. Defendant took the case up to the Court of Appeals, where the judgment was reversed, the latter court holding that the instruction was incomplete in that it did not present to the jury the specific negligence developed from the evidence during the trial. The judgment against the dentist was reversed (*Young v. Wolff*, 175 S.W. 248).

CONVICTION IN COCAINE CASE REVERSED

(*Colorado*) In the case of *Stadler v. People*, Colorado Supreme Court, defendant Lester C. Stadler, a dentist was convicted of unlawfully selling cocaine. He was charged with having sold to one Ralph M. Williams, a certain compound mixture, and product of which the salts of cocaine was constituent and ingredient. Defendant was a dentist of thirty years' practice. The sheriff of Ouray County, Colorado, where the sale was made, gave Williams \$1 with which to make the purchase. One Humphries was directed to accompany Williams as a witness. Defendant explained the sale by saying that Williams came to him in a professional way; that he was partially intoxicated and that he gave him a powder containing no cocaine, to ease his nerves. The lower court entered a conviction against Stadler. On appeal to the Supreme Court the judgment was reversed on the theory that the evidence against defendant was insufficient to warrant a conviction. (*Stadler v. People*, 147 Pac. 658.)

(*Mississippi*) Dentistry is not a "trade" within the meaning of the statute exempting from execution the tools of a mechanic necessary for carrying on his trade, for it is a pursuit requiring a correct knowledge of the anatomy and physiology of a part of the human body, as well as mechanical skill in the use of the necessary instruments; while Webster defines a "trade" to be the business or occupation which a person has learned, and which he carries on for procuring subsistence or for profit, particularly a mechanical employment, distinguished from the liberal arts and learned professions and from agriculture. (*Whitcomb v. Reid*, 66 Am. Dec. 579.)

DID ANYONE EVER HAVE ANYTHING LIKE THIS?*Editor DENTAL DIGEST:*

In extracting a lower second molar badly decayed and broken down I found in the distal root a small "worm" or "maggot" or a species; the tooth was aching, the tissue dead and in bad condition, the worm was alive and seemed to be living on the dead tissue as it was down under the crown which was badly decayed with gum tissue grown over it and it was down under all this.

I would like to know if any one ever found this and how it originated.

L. B. BROWN

Cookeville, Tenn.

Editor DENTAL DIGEST:

I have found through tests on numerous friends this summer that a solution of Chinosol is practically a specific for poison oak or ivy. One tablet dissolved in a quart of water, or for convenience $\frac{1}{4}$ tablet in 8 ounces, makes a 1-1000 solution. The tablets come 12 in a package at 50 cts.

F. L. DUNGAN

Hollister, Calif.

Editor DENTAL DIGEST:

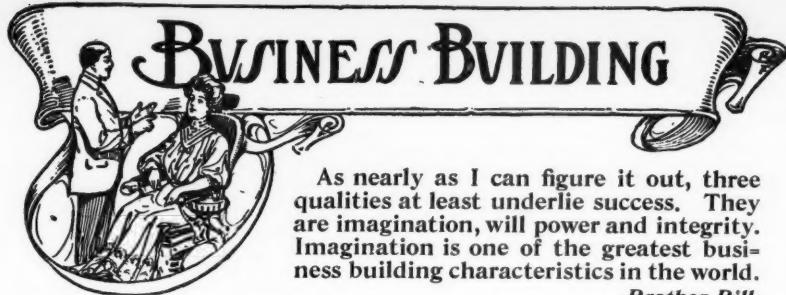
Will you kindly inform me through the DENTAL DIGEST or by letter direct what states still admit to their dental examinations those who are not graduates of dental schools; also what states admit to practice without examination dentists registered in Massachusetts?

F. E. L.

224 Main St., Crescent Blk.

Brockton, Mass.

The presentation of the eighth paper on "Masticating Efficiency in Natural and Artificial Teeth" has been unavoidably postponed to the November issue of the DIGEST.



As nearly as I can figure it out, three qualities at least underlie success. They are imagination, will power and integrity. Imagination is one of the greatest business building characteristics in the world.

—Brother Bill.

ESTIMATING OFFICE COSTS

College costs - - - - -	\$ 1000
Three years time at \$500 - - -	1500
	\$ 2500

Reception Room Investment

Getting Room Ready - - - - -	\$ _____
Floor covering - - - - -	_____
Table - - - - -	_____
Chairs - - - - -	_____
Pictures - - - - -	_____
All items not included above - -	_____
	\$ _____

Operating Room Costs

Getting Room Ready - - - - -	\$ _____
Floor Covering - - - - -	_____
Chair and cuspidor - - - - -	_____
Bracket Table - - - - -	_____
Cabinets, Tables, etc. - - - - -	_____
Engine - - - - -	_____
Switchboard and attachments - -	_____
Appliances and instruments - -	_____
Linen - - - - -	_____
All items not included above - -	_____
	\$ _____

Laboratory Investment

Getting Room Ready	-	-	-	\$	_____
Benches, sinks, etc.	-	-	-		_____
Compressed air	-	-	-		_____
Lathe	-	-	-		_____
Casting appliances	-	-	-		_____
Soldering Appliances	-	-	-		_____
Articulators, Trays, etc.	-	-	-		_____
All items not included above	-	-			_____
				\$	_____

Operating Costs

Depreciation (10% of first cost of office investment)	-	-	-	\$	_____
Refunding investment (5% annually of total investment)	-	-	-		_____
Rent	-	-	-		_____
Heat	-	-	-		_____
Light	-	-	-		_____
Phone	-	-	-		_____
Laundry	-	-	-		_____
Assistant	-	-	-		_____
Publicity (cards, tickets, etc.)	-	-			_____
Express and postage	-	-	-		_____
Taxes	-	-	-		_____
Insurance	-	-	-		_____
Laboratory bills	-	-	-		_____
Magazines and books	-	-	-		_____
Society expenses	-	-	-		_____
Supplies other than precious metals	-				_____
Precious metals	-	-	-		_____
Total practice annually	-	-	-		_____
				\$	_____

WHAT WILL IT COST TO FILL THIS TOOTH?
TEN DOLLARS FOR THE BEST ANSWER



L. R. 1st Molar. Roots treated and filled.

Cavity in the crown to be shaped and a gold inlay placed.

Lingual and buccal walls not undermined.

Adjoining and opposing teeth in position and perfect.

Gold required for inlay, 18 grains, value \$0.87.

PRIZES

For the best answer to the 2 questions below, \$10.00.

For " 2d " " " " " " " 7.50.

For " 3d " " " " " " " 5.00.

Answers must be in my hands November 6th.

QUESTIONS

What will this inlay cost you, when complete in the tooth, including your remuneration?

How did you learn that cost?

Address replies

EDITOR THE DENTAL DIGEST

220 West 42nd Street, New York, N. Y.

FEES CANNOT BE GUESSED AT

with the assurance that they will be fair to both patients and dentist. The fees common in many communities are very unjust. They sometimes require patients to pay exorbitantly for simple operations. They often defraud the dentist of remunerations in difficult operations. And in great numbers of cases they deprive patients of the quality of service they expect and for which they would willingly pay.

As Dr. Van Woert says: "You cannot do justice to your patient, unless you also do justice to yourself."

"DENTISTS," "BUSINESS," AND "PATIENTS"

BY ROBERT LYBROOK SHANKLIN, D.D.S., ROCKFORD, ILL.

Now that your splendid journal has been opened to the voice of the advertising Dentist as well as to his esteemed contemporary in business the "Ethical" practitioner, I am committing myself to this arrangement of both sides of this controversy between "ethics" and "advertising." To tell you how to operate a large business is to tell you an old story of "buying in large quantities" of "splendid equipment" and all that tommyrot which you know is partly true and largely false. I am not going to tell you any of those things but instead I am going to tell you that I am operating an advertising dental office and that I have no apologies to make for it. I count many ethical practitioners as among my best friends and the business and commercial organizations have not denied me their society, nor questioned my purpose in uniting my effort with theirs for better government at home for those things which elevate the standing of my home community. Now this must then be an article dealing in a large measure with my personal self and my personal business as a dentist who advertises. I do not know the methods employed by either "ethical" or "advertising" dentists outside of a few offices which represent but a slight amount of the bulk of either classes of the profession; therefore you will pardon me if I talk plainly of my business and myself because there is nothing to prevent your investigation of the truth of my every assertion and there is nothing to prevent your trying it for yourself if you think mine is not altogether too reverse a method as compared to your own ideas and early teachings.

To begin with I wish to state that my home city has a population of but slightly over fifty thousand people and there are two other advertising offices located here besides many clean capable dentists of the "ethical" persuasion. I operate nine chairs as follows: Six Operating chairs; one Impression chair and two Extracting chairs. My business is incorporated and my associates in business are permitted to share in the profits of the practice. No stock is owned outside of those who are actually connected with the operating of the business and no false promises are tolerated to be made to patients. Now I will tell you why I have said this; because I want you to know that with no "transient" business to draw from I must figure my continued existence on the one thing—"satisfied patients." Not satisfied in a measure, but satisfied absolutely that their work is properly performed. I do not sell dentistry nor advertise to sell dentistry for less than it is actually worth and I put my every energy toward the completion of a professional service that is

as nearly right as it can be under the circumstances as they existed at the inception of the undertaking. With no transient business I am about to close a fiscal year of nearly \$40,000 cash (my business is all cash. I insist upon it irrespective of who the patient is), which represents about eighty cents per capita of all our city population.

Now right down to the gist of this controversy let's figure out the cause of this condition. My opinion is this: the public at large is not interested in "ethics" as it is commonly referred to in classifying dentists. They are not even concerned in who is their dentist if they can get a good service at not too great a cost. Why should they be concerned? They are "purchasers," and "purchasers" are not un-alike when buying dental work or any other necessary commodity. They go "to trade" where their impulse or knowledge of value wills them and their dentist is no exception even though you think he should be. It is an actual condition that exists and if we are to progress in business (professional or commercial business) we must acquaint ourselves with the whims and demands of the public to enable a positive success. Now you will admit that it is the advertising of the past and present that has taught to the unthinking class the necessity of caring for their teeth. Who has done this advertising? The "advertising-dentist" has done it and it is but natural that the recipient of this teaching should look to their teacher as the one best qualified to care for their dental distress. It is positively true that a dental practice can be operated on the advertising basis and give a splendid value and a caretaking service if its management so elects; and it is equally true that an "ethical" business can be carelessly operated if its professional head is honestly ignorant, don't-care careless or personally unclean. The success or failure then of any dental practice and the standing of any dentist in his home community rests largely with the dentist himself, and not with the kind of practice he operates.

Why can't we all get a little closer together and see if it will not work out to everyone's benefit; the laity and the profession alike? Come right out in the wide-open and tell what we know to everybody that ought to know it. The more your patients know of dentistry the easier they are to handle and the more appreciative and willing to pay, you will find them. The two classes of dentists "ethical" and "advertising" have been at social war for these many years and we have not yet devised a code of dental ethics to conform to the modern day demands. We have not progressed as a united organization as we should because of that one failure and it is all so foolish on our part that it should be so. The Manufacturers of dental supplies have done a whole lot for us with the splendid new teeth and furnishings we are now able to purchase, and each day they are carrying on a general campaign of instruction to us in the new

things for our use and benefit. Let us meet them half way; get down to business and teach our patients as we are being taught—teach them to want our product and so increase the volume of our business that we may lessen in a measure the cost to the poor man, who by the way is in the very large majority and who is entitled to good dental work at a price he can afford to pay. It will benefit us financially and it will put within the reach of the poor man the skilled services of a lot of clean, capable dentists who have heretofore allowed their dignity and "ethical" teaching to apply beyond its original intent and purpose.

AN ADVERTISEMENT FROM THE COMMERCIAL ADVERTISER OF 1797.

F. DUPRA. ————— 1797

Surgeon Dentist, No. 160 Pearl St. (near the U. S. Bank) Offers his services to the ladies and gentlemen of this City in curing any disorder with which the mouth may be affected. He tenrifs artificial trath of beaudiful composition, for as to immitate natural ones, and to be equal use. There may be had at his place of residence an aromatic elixir and genuine preservative of the teeth. This elixir preservs as a general antidote against all disorders of the mouth, increses the whiteness of the teeth and preserves them from decay; prevents an ill scented breath; destroys rottenness of the teeth, strengthens the gums, relieves pains & inflamations, and keeps the mouth cool and agreeable. He has also a powder for the teeth of a most excellent quality for cleaning them and retaining the gloss in its natural beauty.

He flatters himself that he will be able to give the highest satisfaction to such persons as maybe pleased to favor him with their confidence. The poor affected with the tooth ach, etc., will be received gratis.

Sept. 18. ————— Mon. 4 weeks.

By Courtesy of Bertram B. Machat, D.D.S., Bath Beach, N. Y.

No business man with sand under his feet worries about the grass
—grass doesn't grow in sand.—*Selected.*

WHY A DENTIST SHOULD INVEST IN LIFE INSURANCE

BY AN INSURANCE AGENT

Did you ever realize as a professional man that you are entirely dependent on your own efforts to gain an income sufficient to support yourself and those dependent on you—that your greatest asset is your brain and bodily strength unimpaired? And unlike a business man, should your health fail and you have to go on an extended journey, your producing income would entirely cease? The business man may have his affairs so arranged that competent employees can continue his business and his income will be diminished little, if any, and his family will be provided for against actual want. You, however, are your own bank account, every check must be cashed by your own efforts, and each mental and physical effort is a sight-draft on your personal account. No man knows just how large his personal account is, but we do know that for every act, mental or physical, we have within us the power to perform just that many less acts.

Let us liken ourselves to the manufacturer who wisely charges off from 5 to 20 per cent. depreciation each year on the factory machines, and by so doing he creates a sinking fund from which to purchase new machinery to replace the old.

Now, if it is good business for the manufacturer to create a sinking fund to replace machinery which can be replaced at any time, is it not vastly more important for you to set aside a little each year during your productive period, the years you are creating a surplus above your actual requirements? And then when the lean years come, and failing health causes you to give up your practice, you can dig into your insurance sinking fund and retire to the old farm you have had in view these many years, being independent of all worry as to the security of your investment. Or should you die during the early years of the contract, you will have the assurance that the wife, children or old folks dependent on your income will be amply provided for. Your contract provides that you can arrange a fixed sum to be paid every month so long as the wife lives, and should she die before the children are self-supporting, they in turn will receive the monthly amount until they reach an age when they can go out into the world prepared to make their way.

The dentist, as well as other professional men, is, as a rule, a very poor investor. He is usually so wrapped up in his profession that he has very little time to investigate the merits of the hundred and one investment schemes that are presented to him as sure things by his many friends and patients. After a few years he awakes to the fact that the stocks he

purchased in the Tooth Powder and Dental Preparation concerns, Gold Mines, Real Estate Schemes and many others too numerous to mention, have not paid him a dividend. He is then reminded of the measly little insurance policy which some pesky insurance agent had persuaded him to buy, and in order to be rid of the pest he had purchased. It suddenly dawns on him that the insurance is the only one of all his investments that has steadily paid him a dividend year after year. He decides that he must have some more of this good thing, but owing to the confining nature of his professional work, he all too frequently discovers that upon a thorough medical examination, such as the Insurance Company demands before accepting him as one of their members, he can not pass.

To bring home to you the serious necessity of your carrying Life Insurance, allow me to ask you what would be the least amount of monthly income you would have to set aside for the use of your family, in case you decided to go away from the city and take a post-graduate course—with the fact in mind that while away from your office your income would cease? After ascertaining this amount, try, if possible, to realize what would be the conditions of the wife and children if you were suddenly called to take the long journey from which no man returns. Can you imagine the wife alone making a plucky, up-hill fight that the children may be kept in school, in order to secure the necessary education and training to fit them, at the present time, for their duties in this life? Who will pay the rent, doctor bills, clothing bill, and the many other expenses which you are called upon to settle for each month from your earnings?

There is only one plan to-day by which your family can be made secure against this possible contingency, and that is by taking out a modern Accelerative Insurance Policy, an example of which I will show: A \$10,000 Thirty Payment Life Policy, at age 35, can be purchased by making an annual deposit of \$291.60. By allowing your dividends to accelerate at compound interest, it will only be necessary for you to make twenty deposits, and your policy contract will then be paid-up for life. From now on your payments cease, but by the further compounding of your dividends this contract will automatically become an endowment payable to you at age 70. Thus by the payment of \$5,832 covering a period of twenty years, you have created a cash sinking fund of \$10,000 for that age when 98 per cent. of the people are either partially or wholly dependent on some one else for their support. In addition to this cash sinking fund you have had advantage all these years of an estate in event of death which has increased in value from \$18,000 the first year to \$11,800 the 19th year and \$14,340 the 34th year.

Now, as a business proposition, you have had, in addition to this,

protection which has had a certain value to you, and should you attempt to buy pure protection alone covering your life, it would have cost you, on the term plan, \$136.20 \times 35 years, the period you would have had to pay on a term policy, which equals \$4,767. Thus you will notice the Company has given you \$10,000 in cash, plus protection value worth \$4,767 making a total value of \$14,767, all for the sum of \$5,832.

Your policy contract has many other advantages, such as paid-up insurance value, extended insurance value and cash or loan value. Any of these advantages are available after the contract has been in force three years.

As evidence that insurance contracts are one of the best forms of investment, I need only mention that in this country alone there are over \$30,000,000,000 of Life Insurance in force.

Now get busy and call up the insurance agent representing one of the good Old Line Legal Reserve Life Insurance Companies in your town and arrange for the policy they have waiting to care for those dependent on you.

ETHICAL HONESTY

Comanche Vanguard: Practical honesty consists in scrupulously paying your debts. And this means that you must be careful in making them and must not make them too much.

What you define as practical honesty is in reality ethical honesty. There is a bit of difference, you know. The man ethically honest desires to pay every penny he justly owes whether he is or is not personally responsible for owing it. The person practically honest desires to pay every dollar he owes because it is good policy to be straight and bad policy to be crooked. Many a man is honest because his good sense tells him honesty pays. Many another is dishonest because he hasn't good sense to advise him of his error. Apart from these is the ethically honest man whose fine integrity impels him to do the right thing regardless of its bearing upon his commercial interest. There are many such. Sir Walter Scott and Mark Twain are notable examples of men ethically honest. There are and have been millions more. And it is such as they who are the nobles of this earth. Whatever his station in life, whatever his fortune, whatever his parentage—if a man is ethically honest he belongs to the nobility.—*Dallas News (Texas Dental Journal)*.

HOW AN ETHICAL DENTIST FELL FROM GRACE

BY T. S. B., NEW YORK

In my last year at college I heard the professor give the advice "strike out young man; do not work for some one else; make your own practice." This struck a responding chord in my heart, causing me to ask advice from a dental friend. He agreed in the above being right as he was doing this precise thing himself. I told him I had never made a bridge, never put on a gold cap, and that I was full of theory, with a gold filling, and two artificial plates to merit my diploma. This did not impress him as objectionable. To-day he is prosperous with rare oil paintings in his parlor, and his office walls covered with cases showing medals, and rare curios. His dental equipment is subordinate, for only in recent years has he bought an electric engine, and a fountain cuspidor. I do not think he cares much for dentistry. He took all the advice that he gave me, but kept for himself the part about marrying a rich wife, and this was the only part of it which was worth anything.

I struck out, or rather sat down in the back parlor of a brown stone house in a genteel neighborhood. A lady with whom I had boarded in student days, promised me that she would fill my office with patients. Vain hope; her daughter had much free work, and when I hinted that half rates would be acceptable, now that I was a D.D.S., she went to another practitioner.

I was ethical, and idle, save for some servant girls, the druggist and the newspaper man, to all of whom I confided my need of patronage. It was done with beating heart, and a sense of shame, for I felt I was very ignorant. I hated the low class of patients which came my way in a limited degree. I wanted better people. I was soon to suffer for my folly, when a lady of this type rang my bell in company with a lovely daughter.

She announced in a refined modulated voice how she wanted dental services. She had been to Dr. Blank, but he was too expensive, and also a long way off, and if my charges were moderate—she left me to imagine the rest.

When I timidly stated the fee, she announced severely that it was "high." I was crushed by the abruptness, and asked her in confusion, what she thought was right. She rose, walked to the looking glass, and answered while drawing on her gloves, "I meant to have you look at my daughter's teeth, but now it does not matter." Slightly inclining her head, she floated through the door, and the lovely girl followed with curling lip. Thus was I punished for desiring fashionable patronage, and when the next day I found a dark lady in my parlor, and was asked

did I work for colored people, I took the tee-hee-ing wench into the operating room. She was respectful, and left money, while the lady in diamonds carried away a piece of my self-respect.

I had a small door plate; I belonged to a church, where I thought it undignified to tell anyone that I was a dentist. Six months and two hundred dollars' receipts looked like the poor-house. In despair I appealed to my pastor for advice. "Send around a neat card," he suggested and gave me the membership roll of twelve hundred members. The outcome was the Janitor came to borrow two dollars; a member of the choir incurred a bill in which I used a lot of gold, and I mourn the loss. The pastor never called socially or to get services for himself, family or friends, while the printing and postage amounted to twenty-four dollars.

The advice in college is to ally with the district society, in which is found the elite of the profession. There I saw well nourished men, one in particular, Dr. Muchmore, addressed us as to our duty to the public who "trusted" us. Dr. Muchmore was pathetic when he appealed to the silent assembly saying: "we should consider our duty to those who defer to our advice." This gentleman seemed miles over my head, although his grammar was a trifle faulty.

When refreshments were in order, I edged to where he was standing alone (which surprised me as I thought he would be surrounded by a throng of admirers), and begged he would tell me his secret as I found it very hard to get confidence. He listened with patience, and answered; "Doctor, my patients defer to me in everything I say."

I would gladly have learned more, but that he saw a man and excused himself. My eyes followed him to a smiling attendant passing segars. I suspected for a moment, and then put away the thought, and held to the hasty invitation he had given, and called on him.

After waiting a few days lest I seem too bold, I sought his address, which was in a side street, in an unpretentious building. The entrance was not well kept, while inside the dental chair showed strong signs of use, and small evidence of care. There was a red-headed young assistant in the laboratory—which also was not tidy—who became friendly when he learned I was a dentist. We went together—as I invited him—to a place where a lunch was served; here we became confidential, and I was soon telling him of much already related, for, he seemed intelligent, and I yearned for knowledge.

"The trouble with you, Doc" commented he, "is you have been raised too fine." We had reached the tobacco stage of our acquaintance. As he shifted his segar from one side of his mouth to the other, he expressed himself thus:

"I went from a Philadelphia college right into an advertising joint. I learned that all people, high and low, want all they can get for their money. We had to work on their mouths, and also on their wily minds

(This article is expected to be continued in the November issue.)

TWO ANSWERS FOR "A. A."

Editor DENTAL DIGEST:

I would like to get the name and address of "A.A." who has an article in September issue of the DIGEST page 575, called "What Am I, Mr. Editor?" He is the most ethical chap I have heard of in many a moon. In the first place he is honest and that is going some. Honest to himself in "getting the business"—honest to his patient in "delivering the goods" and honest with his family in securing sufficient funds to support them properly. I firmly believe that if he does that, he is one dentist in a hundred. He is an advertiser and outside the pale of "the society"; for that reason I would bank more on this type of man than the average "society" man who is always preaching ethics and doing the opposite when it comes to his office. He is superior to a Toledo dentist who gave up his seat in a street car to a lady then gave her one of his business cards. Let us hope A. A. stays on the level and after securing a good start refuses to become ethical and utter tirades on other advertisers from the floor of a society meeting.

Yours very truly,
R. F. P.

Editor DENTAL DIGEST:

In answer to the article in the September DENTAL DIGEST entitled "What Am I, Mr. Editor," written by A. A., will say that the hopeful thing about Dr. A. A.'s condition is that he intends to quit advertising when he gets *real busy*. But why will Dr. A. A. become an ethical dentist? I believe the doctor, down deep in his heart, desires the good wishes and respect of his profession. That it will take this respect and good will, as well as tailor-made clothes and groceries, to satisfy him.

If the doctor is as careful and conscientious as his article leads me to believe he is, it is not necessary that he advertise to soon have a remunerative practice; and when it does come, he would not only have the satisfaction of knowing that it had been honorably achieved, but he would have no past to live down.

T. J. S.



PRACTICAL HINTS

[This department is in charge of Dr. V. C. Smedley, 604 California Bldg., Denver, Colo. To avoid unnecessary delay, Hints, Questions, and Answers should be sent direct to him.]*

TO KEEP SYNTHETIC SLAB POLISHED AND FREE FROM GREASE.—Take wet powdered pumice on tips of fingers. Polish slab all over; rinse in running water and slab is like new again; this will not scratch.—E. P. HANRAHAN, D.D.S., Chicago, Ill.

EMERGENCY REPAIR OF RUBBER BULB OF CHIP-BLOWER.—The break in the rubber bulb of a chip-blower may be covered with a piece of adhesive tape. This makes it as useful as ever.—J. A. TIBBOTT, D.D.S., Wilkinsburg, Pa.

EMERGENCY REPAIR OF RUBBER BULB OF CHIP-BLOWER.—The break in the rubber bulb of a chip-blower may be covered with a thin layer of cotton, which is painted with collodion and allowed to dry. This repair will last until a new bulb can be secured.—J. S. WALKER, *West. Dental Journal (The Dental Cosmos)*.

MELTING ALUMINUM.—In melting aluminum previous to casting, new, clean ingots should always be used. The metal should never be overheated, and when fusing, it should be slightly agitated with the end of an ordinary slate-pencil from time to time, and all dross removed, until a smooth, clean surface presents, after which the casting should be made, observing only moderate speed in doing so, as the metal remains liquid for some moments.—H. J. GOSLEE, *Dental Review (The Dental Cosmos)*.

TAKING IMPRESSIONS WITH MODELING COMPOSITION.—When the composition has been properly molded on the tray, the external surface of the tray is immersed for a few seconds in cold water, thus preventing the heated metal from causing discomfort and pain to the lips. After drying, the surface of the modeling compound is dusted with French chalk of fine quality, and the impression is taken. This method produces an impression of very fine definition, the composition does not stick to the teeth, and the result is pleasing to both dentist and patient.—P. M. COUGHLIN, *Commonwealth Dental Review*.

*In order to make this department as live, entertaining and helpful as possible, questions and answers, as well as hints of a practical nature, are solicited.

AN ADJUNCT IN PRESSURE ANESTHESIA.—Sometimes when attempting to extirpate pulps under cocaine pressure anesthesia, the pulps remain sensitive, as in idiosyncratic cases. I find that 95 per cent. alcohol instead of cocaine acts immediately in producing the desired anesthesia in such cases.—A. S. CAMBAGE, *Commonwealth Dental Review*.

CLEANING THE CERVICES OF TEETH BEFORE APPLYING THE RUBBER DAM.—The rubber dam should never be applied to a tooth before its cervix has been cleaned and disinfected. If this precaution is omitted, infectious material is forced by the rubber and the ligatures under the gum margin, where it may remain for hours. The interruption in the circulation of the blood favors infection of the weakened tissue. For disinfection, hydrogen dioxid followed by thymol-alcohol is recommended.—H. PICHLER, *The Dental Cosmos*.

QUESTIONS AND ANSWERS

Question.—What is the objection, if any, to the use of coin silver, that is pure silver alloyed with 10 per cent. copper, in casting inlays, dummies for bridges, or shell crowns?—J. B. S.

Answer.—In answer to your question I can only give you an opinion which is not based upon much experience. Perhaps other readers can do better for you. Personally I have not used much silver in the mouth feeling that it is too soft and subject to oxidation or, if containing any impurities, to disintegration. But recently I learned from Dr. F. H. Orton of St. Paul, whose ability as an operator and a scientist is unquestioned, that he is using silver a great deal for the inner bands of double banded crowns and dummies, in removable bridge work; the latter being gold plated and replated as frequently as necessary. He recommends the addition of about 5 per cent. platinum to harden and lessen oxidation.—V. C. S.

Question. I want to inquire about two things in dentistry, which bother me. First. As to the treatment of very sensitive first permanent molars in patients from six to eight years. My trouble is here: if I try to do a good conscientious piece of work, the young patient cannot tolerate it—or won't. If I simply remove the deepest decay leaving the fissures unopened, it is a poor piece of work and doesn't last long of course. I am at a loss to know whether it is better to perhaps lose the young patient because of the discomfort and pain necessary to good work

or lose him because of the fillings not performing good service. Of course there are some of these young patients I get along with, and others that make me feel sorry I am a dentist.

The second matter which doesn't trouble me so much, but which I want information on is in regard to partial lower plates. In cases where the natural teeth have a very large contour and are perhaps inclined lingually, I find great difficulty in getting a plate into place without first trimming it so it doesn't fit closely around the necks of the teeth.—R. C. M.

ANSWER.—Answering question No. 1, I certainly would not advise you to drive young patients from your office because of pain inflicted by radical cavity preparation in sensitive teeth. I have done it, but I hope I will never do it again; for I believe that such a patient may be driven away not only from your office but from all dentists, thus receiving a serious and life long injury.

I do not believe in temporizing as a principle of practice, but in these cases by all means temporize, preferably I think with copper cement, making sure that the patient thoroughly understands that you are placing a temporary filling, and why.

No. 2.—It is impossible, I think, to have a partial plate fit closely at the necks of such teeth as you describe. Those who believe in compound impressions for partial plates claim that the compound draws in removing from the mouth just enough to let the plate in over the tooth contours without trimming. But I prefer plates made from plaster impressions and afterward trimmed out with burs at necks of teeth sufficient to allow plate to spring into place, where it should fit very closely to the teeth at its upper or lower margin as the case may be.—V. C. S.

LONG BEACH, CAL., July 22, 1915.

DR. V. C. SMEDLEY,

DEAR SIR.—The cause of the complaint made by Dr. D. M. Steele, of Morgantown, W. Va., July DIGEST, page 454, of unsanitary plates into which vulcanite enters as a component is the *shrinkage of the vulcanite during the hardening process*. Not a single plate made in the ordinary way, using the ordinary bolts and nuts for closing the flask, with gateways provided for the escape of surplus rubber, has ever been made, or ever will be, which is sanitary. The shrinkage, for pure rubber and sulphur (pure black rubber), amounts to about 6 per cent. It is less in colored rubbers, according to the proportion of coloring matter contained.

When rubber compound is hardened into vulcanite, it becomes darker

in color, harder, of greater specific gravity and consequently less in bulk, and more resistant to solvents and atmospheric influences.

These facts concerning the behavior of rubber in vulcanizing were in print almost thirty years ago, but attracted no attention. Not half the dentists will believe them even after a demonstration, until after such an experience as Dr. Steele has encountered.

Let Dr. Steele prepare a cube of red rubber, half an inch on a side, and drop it into soft plaster in a flask; filling the flask immediately, without making any parting, and vulcanize it the following day. Dig the vulcanized cube out of the plaster carefully, and note how the expansion of the rubber in heating has burst the solid plaster. Note also that the sides of the cube, which were flat, will now be (one or more of them) *concave*.*

When vulcanizing is done, the flask should always be under spring pressure; not rigidly closed by bolts. The face of the investing plaster should be cut away leaving a narrow margin of plaster intact around the mould, so that when the flask is closed, there is no escape for the rubber. When heat is applied, the spring will allow the flask to open and a little of the rubber will escape, but some will be retained, which will compensate for the shrinkage if the plate is thin. For thick plates, the only way is to use pieces of thin metal to hold the flask open a little ways, and withdraw them when vulcanizing is about half done. This is the only way in which a sanitary vulcanite denture can be produced. But it is "too much trouble." So say most dentists when told of it.

Yours truly,

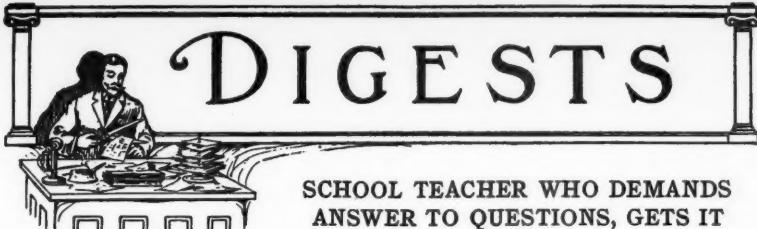
GEO. B. SNOW.

In the matter of the inquiry by Dr. Barker in the July DIGEST, page 453. Had the young lady been subjected to Mercurial treatment?

I once had a patient whose central incisors had separated so that she was wearing a third incisor between the natural ones, on a plate. All the front teeth, upper and lower, projected, giving her a very unsightly appearance. This came about after she had been taking Homeopathic Mercury. A physician prescribed it, and after she had used what was given to her, she found that the physician was out of town. So she got more of it, and continued to take it for about a year.

The gums appeared to be healthy, but the teeth were gradually extruded from their sockets, and there appeared to be an exostosis of the alveoli.—GEORGE B. SNOW.

* In the matter of vulcanizing a cube as an experiment it should be vulcanized at 300° for $1\frac{1}{4}$ hours to insure solidity of the vulcanite, a temperature of 320° with a piece of the thickness mentioned, would be likely to be spongy.—G. B. S.



DIGESTS

SCHOOL TEACHER WHO DEMANDS
ANSWER TO QUESTIONS, GETS IT

THE OTHER SIDE OF THE QUESTION RAISED IN FLOUR MILL BY CHEMIST

BY ALFRED W. McCANN, NEW YORK

Sometime in the future, when we learn how to really take care of our patients, we shall see that they understand something about the nutritive values of foods and how to choose among them. I know a youngster whose parents are having great troubles now because during his first year of life he was fed on foods which produced fat but not bone or muscle or nerve tissue in proper amounts. They have paid out hundreds of dollars to remedy what a little knowledge would have prevented. And each of us has many patients whose whole organisms are deficient because they live on foods which do not supply what the body needs. This article is at least interesting.—EDITOR.

Certain teachers are taking their classes through certain flour mills, where, among other things, the chemists, who pilot the inquiring visitors about, discuss whole-wheat meal, patent flour, and the writer.

"White flour is far more nutritious than any mulatto-colored product ever milled," say these chemists. "There is no proof in the world to indicate that whole-wheat meal or bread made from whole meal is better than white flour or white flour bread."

A Brooklyn teacher writes, "I have gone through the Hecker, Jones, Jewell Company's plant, and having been informed of these things I demand to know why you make such statements as you do. Give us both sides of the question and not your own side only."

HERE IS THE OTHER SIDE, AS DEMANDED

There is only one thing to say to the Brooklyn teacher and to the Brooklyn teacher's pupils.

If the Brooklyn school teacher will obtain three pieces of grits gauze known as No. 30, No. 50, and No. 60 and three pieces of silk bolting cloth known as No. 9, No. 10, and No. 13 the Brooklyn school teacher will have something to work with.

If, in addition to these sifting materials, the teacher obtain a Fairbank scale with weights, measurable by the one-thirty-second of an ounce for rough estimates, and one grain weights for finer estimates, the apparatus will be sufficient for the experiment to be suggested here.

Now if the school teacher will take eight ounces of Knox Crutchfield

Whole Wheat Meal, which is one of the few honest whole wheats on the market to-day, some disclosures will be made that will prove little short of startling.

I have just been through a lot of fake flour, including fake whole wheat meal, of which there are thousands and thousands of fake packages now on exhibition in the stores all over New York, Brooklyn, and the suburbs.

The reason I mention Knox Crutchfield Whole Wheat Meal as the subject of the experiment to be outlined here is because I know all about it. It is just whole wheat, unfiddled, unjuggled, nothing put in, nothing taken out.

Now let the Brooklyn teacher take No. 30 grits and carefully sift the eight ounces of whole wheat meal through it. It will be found that everything but 1 16-32 of an ounce has passed through.

With a magnifying glass, that will enlarge ten diameters, or with a microscope that will enlarge 100 diameters, the results of this first sifting will make an interesting topic for study. The school teacher will discover the 1 16-32 of an ounce to consist of large particles of bran and germ with the "brush flour" that adheres to the bran.

Under the more powerful glass the bran is found to consist of rough, canvas-like, brownish particles, the woof and warp of which can be plainly seen. The germ, difficult to distinguish from bran with the naked eye, will be found to consist of rich oily cream-colored particles.

WOMAN'S HAIR AND BALD HEADS

A chemical analysis of this bran and germ, both of which take up large quantities of water and hold it in the intestines for lubricating purposes, shows that they contain mineral salts and colloids, a large part of which are soluble.

It will be found that silica, sulphur, nitrogen, iron, iodine, potassium, manganese, phosphorus, and many highly organized compounds of these elements are contained in this bran and germ.

The germ is rich in lecithins, or phosphorized fats, without which, it has been conclusively proved, for instance, by the St. Petersburg experiment, that no animal can be properly nourished.

The woman who values her very thin hair, and the bald-headed man who wishes he had some hair, even thin hair, will look with profound interest upon the discarded silica which has just been measured, and the anaemic creature who seeks in vain for solace in beef-iron-and-wine will wish that the miller would not throw all this elemental food to the hogs.

The teacher is now ready for operation No. 2. It will be found, when the balance of the wheat is carefully sifted through grits gauze No. 50,

1 5-32 of an ounce will remain on the gauze. Under the magnifying glass these particles, less coarse than those that were sifted out first, will be identified as bran, germ, and middlings.

No handsomer breakfast food ever appeared on the market and yet such breakfast food is known only to hogs.

The calcium, so necessary to mother Nature in her calcification of tuberculous lesions, under chemical analysis will be disclosed in these rejected keystones of the human arch. These are not McCann's fanatical theories. They are just plain facts. They cannot be denied and never will be denied.

HOW THE SALTS ARE LOST

We are now ready for the third operation, no chloroform needed. The balance of the wheat is carefully sifted through grits gauze No. 60, where it is found that 1 29-32 of an ounce remain behind. The telltale glass reveals the fact that this rejected material consists of fine particles of germ, branny specks, and middlings with their precious salts and colloids so ruthlessly squandered by the human race in its whimsical attachment to flavorless white bread.

A chemical analysis of the contents of grits gauze No. 30, No. 50, and No. 60 put together shows that over half the mineral salts of the original whole wheat have been removed and thrown away, but the teacher is not through with the experiment.

Now No. 9 silk bolting cloth is used and the balance of the wheat is passed through, whereupon it is found that 2 18-32 ounces remain on the silk. Again the glass is applied and it is discovered that the rich, cream-colored particles consist of fine middlings, fine germ, and a few branny specks.

In this intimate mixture the bran is brown, the germ yellow, and the middlings white.

The chemical test is again applied and it is discovered that in silk bolting cloth No. 9 and grits gauze No. 30, No. 50, and No. 60, three-fourths of the total original mineral content of the wheat has been lost. The school teacher is not yet through with the experiment.

Silk bolting cloth No. 10 and No. 13 have yet to be heard from. The balance of the wheat is put through No. 10. Only seventeen thirty-seconds of an ounce remain on the cloth. The glass reveals this stuff to be very fine middlings, sometimes known as farina, sometimes known as cream of wheat. It will not support life.

The pupils are amazed. They have not yet started to feed chickens with the different separations which they have been making. That experiment, with all its disastrous consequences, is still in store for them.

Now we come to silk bolting cloth No. 13. One ten thirty-seconds of

an ounce remains behind. This the glass shows in fine flour, the sumnum bonum of modern milling.

More refined flour can be recovered from the middlings, which are found scattered through all the other separations, so that out of the eight ounces of whole wheat about five ounces of flour, minus the minerals of the wheat, can eventually be recovered.

This flour is subdivided by the millers into patent, straight and low grade. When patent flour is selling for \$7 a barrel of 196 pounds, straight flour is selling for \$5 and clear flour for \$4.25.

The pupils of the school teacher do not know that, in accordance with their poverty or intelligence, or the district in which they live, they buy, these different grades of flour, each of which has many subdivisions, at one and the same price.

For instance up and down the more or less aristocratic centre of Manhattan Island one kind of flour, low grade, under fanciful advertised brands, is sold at 16 cents for a three and one-half pound bag, or about \$10 a barrel.

On the west side a three and one-half pound bag also sells for 16 cents, but it does not contain the same kind of flour, although it does contain the same label. On the 16-cent basis the west side flour is worth about 12 cents a bag, but the more ignorant west side people pay a premium of 4 cents for the difference. The high-grade flour going to the baker, who "knows," costs half as much as the low-grade flour going to the dear people who don't know.

Of course, the school teacher and the pupils of the school teacher do not know this, for the reason that there are no flour standards in the United States.

On the east side, where poverty and ignorance are exploited with a still more lustful hand, the price of a three and one half pound sack remains the same, but the flour within is of a still lower grade.

SEPARATING THE SHEEP FROM THE GOATS

If the school teacher becomes skilful enough it will be easy to separate the low grade, and the dirt-flour, and the inferior flour, and the siftings and tailings, and down-trodden aristocratic refuse from most of the so-called patent flours now on sale in Greater New York.

A few slabs of glass and a few little hills of flour set side by side, carefully slicked off and then immersed in a pan of cold water, will bring out the bloom of the so-called high grade flour, and the gray, and the dirt of its low grade neighbors, after the separation has been made. The lines of difference will be as plainly marked as a hedge fence.

This is not all, oh my, no, the school teacher, and pupils, eager for light, have much ahead of them in the study of white flour as is, and whole wheat meal as it should be.

They want to know something about the feeding experiments that have been conducted right here in New York City, where we have big flour mills, and also in the state of Minnesota, where so much of our white flour originates.

Let us see what the teacher and pupils will discover. The facts are on file in the New York City Department of Health and the New York City Department of Education with respect to the alarming number of physical defectives among the school children of New York.

White bread, which they eat three times a day, has not saved them. Their bones, teeth, blood, and tissue are constantly fed by white bread. It is the one food they never lack and yet their bones, teeth, blood, and tissues reveal the outward symptoms of disastrous ravages, which even the uninitiated can interpret.

Go up to Public School No. 95 on West Houston Street and ask the children, as I did, what they eat for breakfast, dinner, and supper.

Go out to the State of Minnesota and consult Dr. Ernest Hoag, director of the School of Hygiene of the Department of Health of Minnesota. Consult Louis M. Tarman, associate professor of education who studied with Dr. Hoag 3,215 school children of Minnesota.

WHAT THE CHILDREN EAT

It was discovered that 75 per cent. of these children made their breakfast entirely, or almost entirely, on the siftings of the grits gauze and the silk bolting cloths, and that 23 per cent. of these children among other physical defects, constantly complained of headaches.

What did they have for breakfast? This is what they had.

One group had coffee, white bread, and butter.

The second group had coffee and oatmeal.

The third group had coffee and some refined, degerminated, demineralized and impoverished cereal, corresponding in character with the white flour out of the last sieve.

The fourth group had coffee, and hot cakes, made of the refined white flour.

The fifth group had coffee alone.

The sixth group had coffee and biscuits made of the same refined white flour.

The seventh group had coffee and coffee cake made of the same refined white flour.

The eighth group had only white bread and butter alone.

THE ARMY OF WHITE BREAD EATERS

These are white bread eaters, these school children of Minnesota. They show the same physical infirmities which are to be seen among the white bread eaters of New York City. Fifteen per cent. of them never had any fruit at all. In New York City there are 15 per cent. of the school children who never eat fruit. They all have plenty of white bread. What does it do for them?

White bread does not kill children who are otherwise well fed and who get plenty of good milk, fresh eggs, vegetables, greens, oranges, bananas, apples, nuts, honey and maple syrup, but unfortunately, school teacher, all the children of the United States are not so fortunate and those who are not so fortunate live on the so-called white staff of life.

They eat white bread and refined grain cereals, and they eat lots of them, and through tons of such stuff they dig their own little graves with their defective teeth, and the grits gauze and the silk bolting cloth and the Fairbank scales, and the magnifying glass, and the test tubes with a few simple reagents will disclose to the school teacher and the school teacher's pupils what the white flour mills and the brilliant savants never disclose when they talk so indignantly about certain misguided zealots and fanatics who are honestly mistaken in their zeal in behalf of the children of the nation through the whole meal route.

There is much to say and it is very startling and very sensational and very rotten, and I promise *Globe* readers if they continue to read what I have to say that some important disclosures will be made in this column of such a vicious nature that the community if it acts upon the information which is almost within its reach will rise up in wrath and demand redress.

This is too much to hope for in an age of darkness and confusion, but it is to be prayed for. Yes, a consummation devoutly to be wished.—*The Globe and Commercial Advertiser*

AN OLD REMEDY FOR "RHEUMATISM"

Sheffield Neave, of London, states that he had a patient, fifty-five years of age, who had suffered from joint pains, called rheumatism, for over thirty-six years; happening to take sulphur, for the relief of lumbago, he continued the remedy for some four months as a prophylactic. His pains were completely cured and remained so for over six years during which time he took two or three troches of sulphur two days in the week. The essence of the cure, says the writer, is to persist for some months in the use of the sulphur.—*New York Medical Journal*.

A NEW ANTISEPTIC MIXTURE

Corrosive sublimate in a strength of 1:200 mixed with malachite green and applied in a spray in 80 per cent. alcohol is the antiseptic solution employed by the authors. In no case has there been any local irritation, while healing and the growth of epithelium have not been retarded. Even when the skin is already inflamed, as in an extensive pustular dermatitis involving the whole arm and hand, the solution applied daily did not irritate but rapidly alleviated the condition. Further, in no case did mercurial poisoning occur and the urine never contained albumin. The authors have frequently applied the solution to freshly cut surfaces, and it is used as a routine at the time of operation in amputations or other equally extensive operations.

More recently, in an endeavor to use the solution as strong as possible, the concentration of the mercury was increased to 1 per cent. Experience is too short to allow the authors to recommend this concentration definitely, although they have found it to be quite innocuous. Caution is given that this antiseptic mixture must never under any circumstances be brought into contact with the mucous membranes. The patients have received no local treatment in addition to the malachite-green mercury mixture, except fomentations in certain cases for the first few days. The mixture was sprayed on when the fomentations were changed and otherwise whenever the dressings were removed. The general effect of the treatment on the wound was excellent. The surface of the wound when "sloughy" or septic was rapidly brought to a healthy condition. The appearance of the granulations under this treatment was often remarkable. They are quite dry, pink and above all flat. There is no tendency to overgrowth or obstruction of sinuses. Although at the time of application the whole wound becomes green, the color is discharged after a few hours from the healthy tissues, but is retained in sloughs and dead bone. This is due to formation of the "leuko compound" of the stain by the action of the tissues. The growing edge of epithelium is usually intensely stained and it is thought probable that the dye has a stimulating effect on this growth.

The bulk of cases have been treated with the following formula: perchlorid of mercury (cryst.), 1 gm., 80 per cent. spirit (industrial), 100 c.c.; malachite-green (pure), 1-10 gm. 80 per cent. spirit (industrial), 100 c.c. The two solutions are kept separate in bulk and mixed for use in equal parts. It is found that if the two parts are mixed together and kept for several days a compound of mercury and malachite-green crystallizes out of solution. It is emphasized that the application of these solutions in spray must be thorough, comprising the whole

wound and a wide area of the surrounding skin. A superficial sprinkling over a wound is of no value. There is a tendency to apply the mixture insufficiently owing to the smarting which results from the spirit basis in the same way as with iodin. This smarting, however, occurs only during the first three or four days of the treatment of a fresh wound, and though sometimes unpleasant does not persist for longer than one and one-half minutes. If the mixture is applied with a good spray held as far as possible from the wound and if the wound is vigorously fanned this disadvantage may be reduced to a minimum. After the first three or four days the application is painless. Care must be taken that the spirit has entirely evaporated from the skin before the dressings are applied, otherwise blisters may result. This is particularly important when fomentations are superimposed on the mixture; in fact, the stronger formula should not be used together with fomentations.—*Journal American Medical Association*, (Abstract from *The Lancet*).

EFFECTS OF CLEFT PALATE OPERATIONS ON THE DENTAL ARCH

BY H. BLAKEWAY, ARBUTHNOT LANE, LONDON, ENG.

Warwick James, and Thomas H. Kellock—Blakeway favors Lane's operation, in which a flap is taken from one side of the cleft, hinged at the edge of the latter across which it is turned, its raw surface is partly covered by the mucoperiosteum at the opposite side of the cleft, partly left uncovered. The surface from which the flap is raised is left here. The operation is performed on very young infants, seven hours was the age of the youngest, and the contraction of scar tissue that results may draw in the alveolar arch on that side, or prevent its normal expansion; in either case the side from which the flap has been taken may be straighter than on the opposite side. The temporary teeth are often injured by the operation.—Lane and James showed a considerable agreement with the writer, but Kellock disagreed with the view that babies with cleft palate should be operated on at once. When he got the children at the age of a year or eighteen months they were fine, healthy children and better results could be obtained.—*New York Medical Journal*, August 28th, (*Practitioner*, August, 1915).

AN EPITOME OF CURRENT DENTAL AND
MEDICAL LITERATURE

[*The Dental Review*]

Original Communications

Oral Prophylaxis in Its Relation to Pyorrhea and Its Treatments. By T. B. Hartzell.
Report of Committee on Legislation. By C. R. E. Koch.

Report of Public Service Commission of the Illinois State Dental Society. By H. F. Lotz.
Materia Medica and Therapeutics Rational or Empirical, Which? By C. M. Cahill.

*Cysts. By T. W. Brophy.

Faculty Address. By C. S. Case.

CYSTS*

BY TRUMAN W. BROPHY, M.D., D.D.S., LL.D., Sc.D., F.A.C.S., CHICAGO, ILL.

A cyst is a sac containing fluid, or a semi-fluid substance, which may be gelantinous or inspissated. In the broadest sense, a cyst may contain mucus, saliva, bile, urine, etc., depending upon the organ with which the cyst is associated. Formerly, cysts were classified under the head of tumors, but the advancement of pathological knowledge has excluded them from that classification. A tumor is a neoplasm, a multiplication of cells; a cyst is a sac or cavity containing a fluid. Cysts, however, may be associated with neoplasms. Pressure made by their presence may, as a local irritant to the surrounding parts, cause multiplication of cells and the consequent development of new growths. Again, cysts may be developed in bone, connective tissue or in any organ of the body by a dilatation from causes sometimes impossible to comprehend.

There are some conditions which seem to be cysts: pseudo-cysts, as diverticula, bursa and neural cysts.

From the standpoint of the oral surgeon, the class known as retention cysts is the most important, as most frequently he meets them.

A cyst is not necessarily a single cavity or sac. Cysts may be multilocular. The walls are made up of various structures and the fluids differ in composition. Accumulations in the tissues are mainly myxomatous or colloidal, a dropsical or edematous, swelling preceding its formation. It may be due to fatty degeneration of the connective tissue. Usually cysts are preceded by inflammatory processes. Fatty degeneration is the result of diminished blood supply, a change in the composition of the blood or a lowering of the vitality of the cells. The fat globules are present in dermoid cysts, sometimes crystallized into cholesterol. Rupture of blood vessels may be the origin of cysts.

*Read before the Odontological Society of Chicago, May 4, 1915

[*The International Journal of Orthodontia*, August, 1915]

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*Instances of Operative Correction of Mal-Relation of the Jaws. By Vilray P. Blair, A.M., M.D., St. Louis, Mo.

Report of Cases Treated with Dr. Edward H. Angle's New Appliance. By A. H. Ketcham, D.D.S., Denver, Colo.

The Consideration of Constitutional Disorders as an Etiologic Factor of Malocclusion of the Teeth of Children. By James D. McCoy, D.D.S., Los Angeles, Cal.

Excerpts

Normal Occlusion the Basis of the Practice of Dentistry.

Chronic Infection of the Tonsils.

The Jaws, the Teeth, and the General Practitioner of Medicine.

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INSTANCES OF OPERATIVE CORRECTION OF MAL-RELATION OF THE JAWS

BY VILRAY P. BLAIR, A.M., M.D.

Professor of Oral Surgery, Dental Department, and Associate in Surgery, Medical Department, Washington University, St. Louis.

In all cases of mal-relation of the jaws developing during the growing period, that are not due to some trauma or disease of the bone itself, the first recognizable sign is a mal-occlusion of the teeth.

In operating, the surgeon must not attempt impossibilities nor be misled by false issues. Occlusion, normal or abnormal, is the result of pressure and counter-pressure, of growth and apposition, and can seldom be perfectly established simply by two bone cuts. The real issues ordinarily at stake are facial outline (which includes both the profile and the lateral breadth) and the ultimate occlusion, while immediate occlusion is a secondary consideration. To do his work correctly, it is absolutely necessary that the surgeon shall have at least a theoretical knowledge of the scope and limitations of orthodontic operations and some conception of the mechanics of occlusion.

*From an illustrated talk given before the Alumni Society of the Dewey School of Orthodontia, Kansas City, Mo., February, 1915.

[*Pacific Dental Gazette*, September, 1915]

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Special Article

STUDIES IN MOUTH PATHOLOGY FROM THE STANDPOINT OF TOXIN ABSORPTION AND ITS SEQUELÆ

BY JULIO ENDELMAN, D.D.S., AND JAMES D. MCCOY, D.D.S.

1. The so-called chronic dento-alveolar abscess is a combination of reactions to bacterial infection comprising changes in the pericemental membrane (destructive inflammation), in the cementum (limited necrosis), and in the alveolar tissues (rarefying or proliferating osteitis).

2. Septic infection of the pericemental membrane when of the chronic type may give rise to cyst formation or to proliferations of epithelial débris in the parenchyma of the pericemental membrane.

3. Many cases of persistent pericemental inflammation are due to the presence of bacterial excitors within cystic formations or within masses of epithelial and fixed tissue cells.

4. Cases of pericemental infection which resist therapeutic treatment for a period of time varying from four to six weeks are in the majority of cases of the cystic type or of the type in which the epithelial débris and the fixed tissue cells have proliferated (fibrous pericemental degeneration).

[*The Dental Summary*, September, 1915]

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Regular Contributions

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Faith and Fear. By Robert R. Gillis.

*Use of Spence Metal Models in Crown and Bridge Work. By Lewis G. Watkins.

The Relation of Mouth Infection to Systemic Disease. By Martin H. Fischer.

A Soldering Block and Accessories. By R. M. Weber.

Dental Caries. By W. A. Chamberlain.

A Method of Obtaining Dental Service in Hospitals. By Herbert L. Wheeler.

Mesothelial Tumors of the Jaws. By Robert H. Ivy.

*Method of Separating and Regaining Space. By Lewis G. Watkins.

A Few Facts in Regard to Preliminary Education. By R. L. Spencer.

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A Thorough Course in Hygiene for County Training Schools. By Frank W. Miller.

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Practicing Dentistry Under Difficulties.

The Book Case by Your Desk.

USE OF SPENCE-METAL MODELS IN CROWN AND BRIDGE WORK

BY LEWIS G. WATKINS, D.D.S., DETROIT, MICH.

It has been my experience that Spence-metal is a most valuable material in producing models to be used in the construction of bridge work where a very accurate bite is desired. Models made of this substance are much sharper than plaster and when mounted upon the articulator, stand hard usage without bruising or disturbing the occlusal surfaces of the model teeth, so apt to occur when plaster models are used.

The method of procedure is as follows: Place the abutment pieces (crowns or inlays) in position, warm a sheet of Detroit modeling compound and secure a bite by having the patient close the teeth firmly upon it. After this is accomplished, take a plaster impression of the abutment

pieces and adjoining teeth, and a plaster impression of the teeth to be articulated. As soon as this is finished, the abutment pieces are placed in the impression and a thin coating of moldine clay mixed with water is painted over the cavo-surfaces of the inlays, or in the case of shell crowns, they may be partially filled with moldine, thus avoiding undercuts, which would prevent their removal from the model. The impressions are then well saturated with kerosene, and strips of moldine clay built up around their margins to confine the Spence-metal and prevent it from overflowing. We are now ready to pour the Spence-metal, which has previously been melted in a small granite iron sauce pan over a slow flame.

Impressions must be poured as soon after they are taken as possible. Should they be allowed to stand long enough to dry out, it will be necessary to thoroughly saturate them with kerosene to prevent the Spence-metal from adhering to the plaster. Care must be exercised in melting not to overheat, since the sulphur in the compound will be driven off, producing an objectionable odor and making the metal stiff like batter. If overheated, remove from the flame and wait until the molten mass thins, and the bubbles have nearly disappeared. When the consistency of the material is smooth and fluid, resembling ink, pour into the impressions. Hardening will take place immediately. Now place them in water, separate models from the impressions, scrub them and articulate. The abutment pieces should be loosened so that their removal may be easily accomplished, thus making it possible to remove the waxed bridge work for investing.

Success with this method is assured, because after the piece is soldered, it may be again placed upon the model and any slight adjustment of the articulation made.

METHOD OF SEPARATING AND REGAINING SPACE WHERE TEETH HAVE BEEN LOST FOR SOME TIME

BY LEWIS G. WATKINS, D.D.S. DETROIT, MICHIGAN

Cases are often presented to us where it is desirable to reclaim the use of a root that has lost its crown. However, upon examination, we find that the crowns of the teeth adjoining the space have drifted out of normal contact with their neighbors to a point where it is not possible to place a crown of sufficient width and size. This condition may be obviated by using an old but effective method which is as follows: Place the end of an elm stick in a vise and compress until it can be slipped into the space to be separated, and sawed off short enough to avoid interfering with the articulation. In cases where a very short root is to be reclaimed, a piece of softened gutta percha may be placed over the root end to force the gum tissue away and the wedge inserted over it. Sufficient expansion of the

wood will take place as soon as the saliva comes in contact with it, to produce a gradual and quite comfortable separation which will continue for several hours. It is well not to force this wedge in too tightly, since a too rapid separation will result with much discomfort to the patient. In most cases one wedge worn from twenty-four to forty-eight hours will provide the desired space, while in some cases two wedges may be necessary.

This method not only has the effect of producing a separation but has a far more important one, i.e., forcing the drifted adjoining teeth back into firm contact and tilting their occluding surfaces into correct alignment and articulation, thereby eliminating one of the fertile causes of pyorrhea pockets. There need be no fear of losing the space obtained, while the crown is being made and adapted, since the wedge may be removed and replaced as often as necessary. Hickory was formerly recommended for making these compressed wedges, but I have found that elm is better since it is a soft wood that will admit of considerable more compression without splitting, and will take up moisture more rapidly.

[*Items of Interest*, September, 1915]

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Exclusive Contributions

*Local Anesthesia in Operative Dentistry. By Leo Stern, D.D.S.
An Accident with Anesthesia. By A. Berger, D.D.S.

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The Relation of the Internal Secretory Organs to Malocclusion, Facial Deformity and Dental Disease. By Clarence J. Grieves, D.D.S.

Society Papers

The President's Address. By Dr. George Y. Wilson.
Keeping Our Patients Comfortable During Mastication. By Dr. O. L. Whitson.
Efficiency. By George R. Warner, M.D., D.D.S.

LOCAL ANESTHESIA IN OPERATIVE DENTISTRY

BY LEO STERN, D.D.S., NEW YORK CITY

1. Preparation of all types of sensitive cavities.
2. Extirpation of pulps.
3. Grinding and shaping of abutments for crown and bridgework.
4. Scaling and planing pyorrhetic roots.
5. Anesthesia of pericemental diseases, including alveolar abscess, enabling painless opening into the pulp chamber to relieve congestion.

6. Prophylaxis of inflammatory conditions (according to the method of Dr. Riethmüller), including hyperæmia of the pulp.

Stern advocates I. a 2% solution of novocain-suprarenin using Ringer solution as the dilutant.

II. The Fisher syringe.

III. Iridio-platinum needles.

IV. The suspension of two syringes mounted with 42 mm. and 23 mm. needles respectively in a solution of alcohol three (3) parts, glycerine one (1) part.

GENERALIZED TECHNIC OF INFILTRATION ANESTHESIA

1. Asepsis obtained and preserved.
2. Isotonia of solution.
3. Sterilization of mucosa.
4. Quieting any nervousness on part of patient.
5. Two injections, one buccally and one lingually.
6. Orifice of sterile iridio-platinum needle pointed towards bone.
7. Slow injection with strong pressure.
8. Massage of mucosa to distribute solution.
9. Wait of ten minutes during which preparations for operating may be made.

[*The Dental Cosmos*, September, 1915]

Original Communications

Some Advantages of Jacket Crowns. By Wm. A. Capon, D.D.S.

A New Method for Indicating Normal and Abnormal Relations of the Teeth to the Facial Lines. (I.) By J. A. W. Van Loon, M.D., D.D.S.

*Constitutional Infection Due to Chronic Dentico-alveolar Abscess and Pyorrhœa Alveolaris. By L. W. Doxtater, D.D.S.

Prevention—the Technique of the Future. By Dr. C. H. Gerrish.

*Concerning the Production of Dental Caries. By Arthur Hopewell-Smith, L.D.S., L.R.C.P., M.R.C.S.

The Treatment of Pyorrhœa Alveolaris and Its Secondary Systemic Infections by Deep Muscular Injections of Mercury. By Barton L. Wright, M.D.

*A Note on the Etiology of Pyorrhœa Alveolaris. By M. R. Smirnow, M.D.

Endamoebæ and Emetin. By Rudolph C. Lienu, D.D.S.

The Retention of Partial Dentures. By Ellison Hillyer, D.D.S., Sc.D.

Pockets—Pyorrhœal or Otherwise. By Eugene S. Talbot.

Continuous Gum Combinations: An Historical Sketch. By Dr. Loomis P. Haskell.

Nitrous Oxid, Oxygen, Alone, in Mixture, and in Sequence for the Extraction Operation. By Charles K. Teter, D.D.S.

CONSTITUTIONAL INFECTION DUE TO CHRONIC DENTO-ALVEOLAR ABSCESS AND PYORRHEA ALVEOLARIS

BY L. W. DOXTATER, D.D.S., NEW YORK, N. Y.

It is important for the dental practitioner to recognize the constitutional diseases due to local infections in the oral cavity.

It is only recently that we have begun to appreciate how common is the contamination of the blood by living organisms. For some time only the more serious conditions of septicemia and pyemia were recognized as being caused by living bacteria in the blood, whereas this fluid may contain many living bacteria that may be a source of disease, such as streptococci, staphylococci, and various bacilli.

ORAL INFECTION AS THE CAUSE OF SYSTEMIC DISEASE

The leading physicians of the country to-day first look to the oral cavity for infections that may be the causative factors in systemic diseases. Murphy states that every type of non-traumatic inflammation of the joint is the metastatic manifestation of a primary infection in some other part of the body.

Dentists are becoming cognizant of the fact that a large percentage of infectious arthritic conditions is due to pyorrhea alveolaris. Pyorrhea accounts for an enormous amount of blood infection; 75 per cent. of these cases can be healed by treatment, and most of the others can be held in check by continued treatment. In some cases, removal of the teeth is necessary to accomplish a cure. Removing teeth that are hopelessly infected prevents the harboring of certain bacteria.

The nasal cavity has its special group of bacterial flora, but the great majority of pyogenic micro-organisms affecting the body must enter through the mouth.

In the mouth the teeth are subject to infective destruction from many causes, but by far the most destructive are root abscesses that are developed from diseased pulps of teeth. Very frequently these abscesses are not suspected until their presence is revealed by the X-ray.

CONCERNING THE PRODUCTION OF DENTAL CARIES

BY ARTHUR HOPEWELL-SMITH, D.D.S., L.R.C.P., M.R.C.S., PHILADELPHIA, PA.

Pickerill writes:—

"To the etiology of dental caries a large number of factors may or do contribute. There are four chief factors, two attacking, carbohydrates and organisms; and two defensive, the resistance of the enamel surface and the protective action of the salivary secretion. Each of these may vary more or less, and so the possible permutation and combinations favoring caries are approximately 24. But each of these factors is composed of a large number of contributing factors: The variations in the fermentability of the carbohydrates consumed, the number and type of organisms present, the different possible weaknesses of the enamel surface, and the varying amounts of the chemical constituents of saliva. In addition,

there are the other systemic factors of internal secretions and hyper-nervous development. I have made a rough estimate of the possible permutations and combinations of all these factors, and find it is about 3,628,000. That is to say, in 3,600,000 cases of caries no two might have exactly the same combinations of causes. . . . There is no golden key to be discovered to unlock the riddle of dental caries."

With some of the above I am in agreement, but I feel convinced that until our knowledge of the laws of symbiosis, antibiosis, and commensalism, as practiced by the oral flora, is more exact, and our knowledge of the salivary secretion more complete, we cannot be certain as to their influence in the causation of dental caries.

If it is assumed that the number of the micro-organisms in the oral cavity must be reduced, it is plain that this can be done by hygienic means and by the exhibition of warm water or of weak acids which inhibit bacterial growth while doing no harm to Nasmyth's membrane or the enamel surfaces;—acting on the hypothesis also that by using these measures we may destroy the beneficent influence they may possess, and perhaps alter or modify in some way the phagocytic action of cells inhabiting the oral cavity.

One thing would appear to be obvious—that the mechanical cleansing of the mouth and its contained organs is of the highest importance, that its sterilization is an impossibility, and probably an undesirability, and that the use of chemical agents and antiseptic remedies may, generally speaking, be not only valueless but sometimes actually harmful to the tissues, and should therefore be studiously avoided, unless their uses are distinctly indicated by signs and symptoms the significance of which are satisfactorily and convincingly established.

A NOTE ON THE ETIOLOGY OF PYORRHEA ALVEOLARIS

By M. R. SMIRNOW, M.D., NEW HAVEN, CONN.

(1) There is not sufficient evidence on hand at present to conclude that the endamoeba buccalis is the primary etiological factor of pyorrhea alveolaris.

(2) There is as much and possibly more basis for attributing the cause of pyorrhea to bacterial infection, the strepto-pneumococcus group being concerned in particular.

(3) Pyorrhea, or a condition closely simulating it, may be found to occur naturally in cats, dogs, and monkeys, in which organisms are found similar to those found in man.

(4) Though single experiments are not to be relied upon, nevertheless the production of pyorrhea in one of two carefully selected cats by means of streptococci is at least suggestive, and would tend to support

the view that these bacteria are concerned in the etiology of pyorrhea alveolaris.

[*Journal of the National Dental Association*, August, 1915]

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- Possibility of the Elimination of Pain from Dental Operations—A Symposium
General Anesthesia and Analgesia by Somnoform. By W. H. DeFord, A.M., D.D.S., M.D.,
Des Moines, Ia.
Nitrous Oxid and Oxygen Analgesia in Operative Dentistry. By J. P. Henahan, D.D.S.,
Cleveland, Ohio.
Local Anesthesia. By Kurt H. Thoma, D.D.S., Boston, Mass.
High Pressure Anesthesia. By W. T. Jackman, D.D.S., Cleveland, Ohio.
Proposed Classification of Fixed Bridgework and Law Governing its Application. By Alden
J. Bush, D.D.S., Columbus, Ohio.
*Pyorrhea Alveolaris. By John Deans Patterson, D.D.S., Kansas City, Mo.
The Research Department.
*Dental Caries. By Russell W. Bunting, D.D.Sc., and U. G. Rickert, B.S., M.A., Ann
Arbor, Mich.
The Dental Department of the American Hospital. By Herbert L. Wheeler, New York City.

PYORRHEA ALVEOLARIS

BY JOHN DEANS PATTERSON, D.D.S., KANSAS CITY, MO.

Conclusions

If *Pyorrhea Alveolaris* can be permanently relieved by intelligent pains-taking and persistent attention to instrumentation local therapeutic and subsequent scrupulous determination on the patient's part to divorce the teeth and their surrounding tissues from any form of local irritation or infection—(and the writer asserts that possible) then the vaccine treatment whether by autogenous or stock preparation is unnecessary and unscientific.

If faulty metabolism is present in a patient, or systemic complication exists which invites the infection of tissue by micro-organic life processes and thus defeats the efforts of nature to remove obstacles—then those systemic conditions should be at once corrected—but in the case of the treatment of Pyorrhea—not by vaccines—but chiefly in *nature's simplest remedies of food and plant, fresh air, exercise, deep breathing, refreshing sleep, absence of consuming care and worry.*

When will man get to know that nature's eliminatives are the only dependable ones, and that drugs are only for emergencies.

DENTAL CAVIES

BY RUSSELL W. BUNTING, D.D.Sc., AND U. G. RICKERT, B.S., M.A.

Conclusions

The density of the external enamel surface of the teeth is capable of change.

This change may be coincident with the changes in bodily health and the calcium content of the saliva.

A consolidation of the enamel surface may be induced by continued polishing and rubbing in prophylactic treatment extended over a considerable space of time.

Results so far obtained warrant a further study and investigation of the calcium content of the saliva in its relation to the condition of tooth tissues and their susceptibility to dental caries.

[*Dominion Dental Journal*, August, 1915]

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Original Communications

Root Canal Preparation. By J. R. Callahan, Cincinnati, Ohio.

Sunbeams and Shadows in Dentistry. By Jas. G. O'Neil, L.D.S., D.D.S., Fort William, Ont.

Principles and Practice of Treating Children's Teeth. By J. A. Bothwell, D.D.S., L.D.S., Toronto, Ont.

Discussion.

Method of Construction Enabling the Use of Removable Bridges. By Oliver Martin, D.D.S., L.D.S., Ottawa, Ont.

Editorial

*Selective Orthodontia.

Dentistry and the British Army.

Appointments to Mobilization Camps.

Obituary

Horace Canning Wetmore, D.D.S.

SELECTIVE ORTHODONTIA

One of the first things done by the orthodontic specialist was to create an ideal to which all cases must conform. If the ideal could not be accomplished nothing should be done, no half measures. Improvements short of the ideal were impossible. As a gleam of light for the poor and badly disfigured, we quote in full an editorial from *The International Journal of Orthodontia*:

Orthodontia has been defined as that science which has for its object the correction of malocclusion of the teeth. "Selective orthodontia" may be defined as that branch wherein certain practitioners only treat those cases that are capable of being carried to a successful termination or those cases in which they can produce what they call "ideal results." We find in the practice of orthodontia a great many men who have reached the stage where they "select patients," either because the patient pays a "select fee" or because the case is one which can be easily treated and an

ideal result obtained in a short time. This leaves untreated a large number of cases, one class of which includes those who are financially unable to pay the fees which certain practitioners demand for orthodontic services. We agree that it is impossible to set a price as to what any man shall charge for his services or what shall be the limit at which he should take cases. Some are able to control a clientele which will pay large fees, others may serve that class of patients who will pay only small fees. Still there remains a large number of patients requiring orthodontic services, who cannot pay a reasonable fee to enable them to have their work done in private practice and therefore must be treated in clinics. However, there is another class of patients, namely, those presenting malocclusions which render an ideal result impossible, who have trouble in obtaining orthodontic services. We have seen many cases of malocclusion, some of which have been the result of neglect, some the result of bad dentistry (the extraction of teeth and improper filling), some the result of neglected nose and throat work, and still others the result of congenital conditions; all of which presented cases of malocclusion that demanded some sort of treatment and all presented conditions which prohibited the obtaining of an ideal result. A great many of these patients can pay for the services rendered, they can pay a good fee; yet, we find men who claim to be specialists in orthodontia refusing to treat such patients because they cannot get an ideal result. From the humanitarian standpoint, such an attitude is certainly not proper.

Certainly the most important thing to consider is the benefit the patient is to derive, either from a surgical operation or from orthodontic treatment. In surgery, if a patient has one chance in ten to recover, the surgeon should give him the advantage of that one chance. If orthodontic treatment will improve the occlusion of the teeth, if it will improve a facial deformity even though the result will not be ideal—even though normal occlusion is not established; most assuredly the orthodontist should treat that case.

[*Oral Hygiene*, September, 1915]

A Visit to the Forsyth Dental Infirmary for Children.

A Come-Back. By Frank W. Webster, D.D.S., Philadelphia, Pa.

Malpractice Suits—Their prevention. By C. B. Warner, D.D.S., Urbana, Ill.

Preparation of Amalgam Fillings. By Dr. A. Osgood, Bath, N. Y.

Emetine Hydrochloride in Pyorrhea and an Exception to the Remarks of Dr. Lindsay. By Geo. D. Craig, D.D.S., Bisbee, Ariz.

Collecting by Mail. By I. H. Kline, Rochester, N. Y.

Emetine and Pyorrhea Alveolaris. By M. Hillel Feldman, D.D.S., New York.

Experience with Nitrous Oxide and Oxygen. By John T. McIntee, D.D.S., Rochester, N. Y.

Oral Hygiene Movement in Australia.

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A Few Love Letters.
The Rochester Dental Dispensary.

[*Oral Health*, August, 1915]

Photograph—Dr. A. E. Webster, Toronto.
The Operation of Tooth Extraction. By T. W. Widdowson, L.D.S., R.C.S., Eng.
Buffalo Letter. By Habec.
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Special Meeting of Faculty and Board R. C. D. S. of Ontario.
The Canadian Army Dental Fund.
Asepsis and Modern Dentistry. By M. J. Payne, D.D.S.
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Modern Methods of Producing Local Anesthesia. By Herman Crinz, M.D., D.D.S., Philadelphia.
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[*The Dental Outlook*]

Original Communications

Copper Cements. By W. S. Medell, B.S.
Artificial vs. False. By A. Knocker, D.D.S.
The Dental Profession and the Law-Makers. By Hon. M. Baldwin Fertig.
An Interesting Communication. By McReynolds and Hunter.
Report of Waldo J. Morse, Jr., Investigator for the Allied Dental Council.
Dr. Ratner, Chairman Legislation Committee of the Council, Assaulted.
Fake Toothache of Cocaine Raider Traps a "Dentist."
Want Law to Class as Felons "Fake" Dentists.

[*The Practical Dental Journal*, August, 1915]

Original Papers

Pyorrhea. By Julian Smith, D.D.S.
The Oral Cavity. By G. Walter Deltwear, D.D.S.
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[*The Dental Register*, August, 1915]

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A Consideration of the Causes of Dental Disease with Special Reference to Present-day Practice. By Otto E. Inglis, D.D.S.
Some Fallacies in the Treatment of Phenol (Carbolic Acid) Poisoning.

[*British Dental Journal*, August 16, 1915]

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- Medical and Surgical Teaching for Dental Students. By Douglas Douglas-Crawford M.B., C.M. Edin., F.R.C.S. Eng.
 A Note on Extraction. By J. G. Turner, F.R.C.S., L.D.S. Dental Department, King George V. Hospital (Illustrated).

Selected Articles

- "Mummification of the Pulp." By E. Randolph Magnus, D.D.S.
 "The Latest Practical Attachment" (Illustrated). By Dr. H. F. Merck, Belleville, Ill.

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- "The Dental Curriculum."

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- William Somerville-Woodiwis, L.D.S., Edin.
 Ernest Charles Hale Jessop, L.D.S.I.
 Captain James J. Dykes, 5th Battalion K.O.S.B., L.R.C.P. and S.Ed., L.R.F.P.S. Glas. and L.D.S.Ed.
 Thomas Harry White, M.R.C.S., L.D.S., Eng., L.S.A.

[*The New York Medical Journal*, August, 1915]

Original Communications

- *Mouth Hygiene. By Eugene Lyman Fisk, M.D., New York.
 The Teeth and Their Relation to Health. By S. Seilkovitch, M.D., Philadelphia.
 Mouth Infections; Their Cause, Treatment, and Systemic Effect. By Arthur H. Merritt, D.D.S., New York.
 Pyorrhœa Alveolaris as a Cause of Systemic Disturbances. By A. E. Fossier, A.M., M.D., New Orleans.
 Pyorrhœa Alveolaris. By F. E. Stewart, Ph.G., M.D., Phar.D., Philadelphia.
 The Relationship between Dentist and Physician. By William B. Dunning, D.D.S., New York.

Our Prize Discussions

- *Prize Question CLIX. The Rôle of the Dentist in the Therapeutics of Internal Diseases. By R. S. Robertson, M.D., New York.

Editorial Articles

- The Dentist's Dilemma.

MOUTH HYGIENE

BY EUGENE LYMAN FISK, M.D., NEW YORK

1. Beginning in infancy, a thorough physical examination and survey at regular intervals, in order to detect any possible focus of infection

or any physical impairment that may lead to the formation of such a focus.

2. The practice of personal hygiene all along the line, in order that the general resistance to infection may be raised to the highest power.

3. Proper diet in infancy, which means, wherever possible, mother's milk, in order that there may be a regular and healthy development of teeth and jaws. As the child grows older, the cultivation of normal eating habits, especially vigorous use of the jaws by thorough mastication and the eating of hard, resistant, crusty foods every day.

4. The use of fruit in the diet between meals, especially apples, which mechanically cleans the teeth, and which by the action of fruit acids removes the mucin plaques that favor decay.

5. A thorough mechanical cleansing of the teeth with clean water and stiff brush, used with a rotary motion, not forgetting the tongue.

6. Thorough dental cleansing of the teeth at least every six months.

7. If unfortunately dental decay has taken place, care on the part of the dentist thoroughly to treat infected roots, so that a septic focus may not be sealed in by a filling; in all cases of doubt, the use of the X-ray, in order to determine the condition of the roots. It is said that few people arrive at maturity without a chronic alveolar abscess. An X-ray of the jaws as a starter in mouth hygiene would be a wise precaution for every one.

8. The development of the teeth should be closely watched, and irregularities, interfering with proper contact between upper and lower teeth, corrected or prevented. The earlier this is done, the better for the patient.

9. Bearing in mind that the endamebas are possible factors in pyorrhea, a simple harmless preventive is available in a mouth wash made by adding two drops of fluid extract of ipecac to a half a glass of water, used before retiring. This will not be of any service in well established cases of pyorrhea, but in the earliest stages it may check the condition.

10. When pyorrhea has become fully established, no pains or expense should be spared in curing the condition, as it is a constant menace to life and health. Experience has shown that this disease can be cured by thorough and persistent treatment, if there has not been too much destruction of the tooth sockets. Where the teeth are hopelessly loosened and the sockets destroyed, it is often far better to remove them, just as it is far better to extract an abscessed tooth rather than endanger the patient's condition by endeavoring to save it. It is better to lose a tooth than to lose a heart or a kidney. On the other hand, the tooth should not be ruthlessly extracted on the first suspicion of trouble. Common sense and a due sense of proportion are necessary in these matters.

It would be difficult indeed to exaggerate the importance of oral hygiene. It has been said that practically every one has infection by endameba. The Life Extension Institute, in the examination of employees in New York and Boston, found twenty-three per cent. of well groomed and otherwise well kept clerks, in preferred occupations, with infected teeth and gums, and all these men were referred to their dentists for attention. The result of the inspection of school children, tabulated and analyzed by the Committee on Health of the National Council of Education and the American Medical Association (Dr. T. D. Woods, chairman), showed defective conditions among 48.8 per cent. in the rural districts, and 33.58 per cent. in the cities. These, of course, relate to gross defects evident on ordinary inspection.

Among the cases of oral sepsis or mouth infection examined by the Life Extension Institute, the proportion with early indication of serious chronic disease, disturbances of the bloodvessels, kidneys, etc., was seventy-two per cent.

In one group recently examined, forty per cent. showed mouth infection, about double the proportion shown in other groups; and the proportion of systemic disturbance—high blood pressure, anemia, heart and kidney disturbances—was likewise double that found in other groups. In some cases the lowered systemic condition may have contributed to the mouth condition, but the uniformity with which such constitutional conditions are benefited by cleaning up the mouth focus and the great improvement in the general condition and scholarship of groups of school children whose mouths have received thorough treatment, is sufficient evidence of the enormous importance of the mouth as a primary source of danger to the body.

With diseases of this class rapidly increasing and encroaching upon early life, a definite cause, such as mouth infection has been demonstrated to be, should be attacked vigorously, systematically, and untiringly.

PRIZE QUESTION CLIX. THE RÔLE OF THE DENTIST IN THE THERAPEUTICS OF INTERNAL DISEASES*

BY R. S. ROBERTSON, M.D., NEW YORK.

Perhaps physicians were more rudely shaken over various subjects in former years than recently over oral sepsis, a term which I use to imply all concomitant conditions in the mouth following untreated pathological processes. In this category for our subject we must place cavities, broken teeth, unextracted roots, alveolar abscesses, sinus fistulas, chronic gingivitis from lead poisoning (for it is recognized that those with perfect

*The Prize of \$25 for the best paper submitted in answer to Question CLIX was awarded to Dr. R. S. Robertson, of New York, whose article appears here.

teeth and accustomed to care of the mouth are free from mouth symptoms of lead poisoning), and greatest of all, pyorrhœa alveolaris in its rapidly progressing stages. No place in the body is found with more of the growth requisites of organisms, pathological and otherwise, than the mouth; bacteria, amebas, and streptothrix, many of which can be recovered from one of two places, in, about, or around the teeth, or from the tonsil. We are concerned with the former.

Allowing that dentists are familiar with the foregoing facts, too great a presumption, I fear, we are under the necessity of expecting them to have a conspicuous part in the drama of the preservation or recovery of health, as a proper position for a man is the place where his training makes him efficient. Four years devoted to as highly specialized a subject as dentistry prepares for great efficiency on a subject relatively small compared with the physician's. It should teach him that practitioners of general medicine have a greater field and wider outlook and are, by reason of their varied experience with the human organism, in general, capable of logical deductions—*even those that overlap and reach into the dentist's domain*. This gives the dentist a double capacity—that of consultant and operator, yet demands intensive coöperation with a physician.

We find a few dentists who are doing highly intelligent, excellent work, using the most modern equipment, X-ray, etc.; a great many more, unfortunately, are like physicians in their mediocre routine. What we want are dentists who are alert to our new conceptions, who are awake to the crying need of oral *asepsis* (as far as concerns the teeth), and who have a keen appreciation of the duty they have to perform in conjunction with the physician or surgeon in the therapeutics of internal diseases.

A physician or surgeon devotes years of study and work along general lines; he gives to charity and institutional work unmeasured time. He has to do this, for his ability arises from his enormous experience. I want here to express my full meaning—that in order to perform a "proper rôle" a dentist must prepare himself along these lines. A greater variety and number of cases seen from a general standpoint gained in this way must be part of the dentist's equipment. Dentists should observe the stupendous reach over the whole metabolism of the human body, for instance, in pyorrhœa alveolaris. Charity and dispensary work is as indispensable to the progressive dentist as to the physician. I feel that the dentist must learn as the physician learns a specialty—through long experience and study without recompense. Dentistry would be farther advanced to-day if we had a few cases of great unselfishness and self-sacrifice on the part of dentists, as we have in thousands of cases among physicians.

In this way a dentist can recognize his special training in an increased ability to treat conditions on a sound and rational basis, using the fundamental principles of to-day in pathology. The internal disease being diagnosed by use of these principles, the internist having recognized the fundamentals, the dentist can get a proper conception of his function. As experience with cases proceeds and the routine life and ailments of the patient are known, the relative influences of disease processes are pointed out, *by the physician*; then only can the dentist do his part in the application of "nonmedicinal influences to the preservation or recovery of health." The presence of pus in the mouth of his patient must mean more to the dentist than a continuous source of income; it should bring to his mind a possible train of symptoms, chronic rheumatism, septic ulcer, bacteriemia, amebic dysentery, etc., and cause him to work more diligently, using the aid of an efficient internist, who is capable of judging the internal resulting or complicating disease.

Principles of hygiene of the mouth must be part of a general educational propaganda backed by dentists. It is an important function for anyone to seek to enlighten the masses on the care and preservation of the teeth from infancy to old age. No "atmospheric" influence has a greater effect on health than the air being drawn into the lungs through a clean, sweet mouth. Neglect of the teeth means neglect of personal hygiene.

Diet does not concern the dentist. In the language of the day, it is "up to him" to provide his patients with proper masticating surfaces; *a*, there must be proper alignment of the molars for chewing; *b*, there must be opposing surfaces for crushing food; *c*, the cutting edges of the teeth must be in proper condition; *d*, there must be general effort to instruct proper cleansing of the teeth. These are little things, but the little things count.

[*New York Medical Journal*, August 14, 1915]

THE RÔLE OF THE DENTIST IN THE THERAPEUTICS OF INTERNAL DISEASES

Alonzo Milton Nodine, D.D.S., observes:

Convincing evidence gathers which reinforces the conviction that proper mastication with efficient teeth is necessary for the thorough digestion of a mixed diet. The psychological effect on digestion of thorough chewing is well known. When inefficient teeth have been removed or repaired and proper artificial substitutes inserted, when the feces have been examined before and after, it has been determined, after repeated and numerous experiments, that molar teeth are necessary for proper digestion of starch, and bicuspid teeth for the proper digestion of

meat. The removal and replacement of such artificial or natural teeth may be detected from evidence in the feces and further, it may be determined which group of teeth had been removed or replaced.

This establishes the rôle of the dentist in that large number of cases in which there exists a disorganization of the digestive apparatus in whole or in part; the digestive processes having broken down, because they were unable to cope with the ingestion of poorly chewed food.

Failure and repeated failure confronts the internist in the treatment of such conditions because the patient's masticatory apparatus is so inefficient and so disorganized as to defeat his best efforts. In hardly any field is the coöperation of the dentist and the internist productive of results so gratifying, so immediate, and so permanent. The internist then has at least the chance of establishing proper organization in the alimentary tract and proper dietary conditions. The importance of this is so well known in the treatment of tuberculosis as to need no further comment.

Malnutrition and intestinal stasis, in children and adults, are due quite as much to the inability properly to masticate food to extract the contained nutriment as to a diet which is insufficient or unwholesome.

That patients have the required number of teeth is not sufficient. The teeth must be in good repair and so arranged that they can chew food in a thorough manner.

Children and adults with contracted and warped dental arches also have, either as a cause or a result, deflected nasal septums and contracted chests. Chronic bronchitis, nasal catarrh, hypertrophied tonsils, or adenoids also may be present. Most of these patients so handicapped are mouth breathers. They fail to use or are unable to use one of the body's best defences—the most ciliated epithelium of the nose and turbinated bones which filters the germ laden air.

When these contracted arches—either in children or adults—are expanded and straightened, this widens the nose and straightens the septum. This alone frequently corrects the conditions before mentioned. But in coöperation with the physician the dentist may insure the permanency of his own efforts and assist in and make possible the correction of the conditions which are the special work of the physician.

Frequently dentists and physicians fail to accomplish and maintain what they set out to do because either one has neglected to secure the coöperation of the other.

In this special field the coöperation of the dentist and the physician is productive of the most permanent and happy results. Consider the part that mechanical irritation set up by diseased teeth and their faulty artificial substitutes.

Malignant growths are found with a peculiar and alarming frequency in the mouth, the jaws, the tongue, and the lips. Leaving out of consideration cancers of female genital organs, the mortality from such malignant growths in New York State last year was a little more than four per cent. of the total number. Whatever the cause of cancer may be, it is almost always found at some point of irritation. How easily and frequently dental irritation may be set up by the sharp edge of a decayed, broken or abraded tooth or root on either the tongue, gum, or lips or cheek! Again, the sharp edges of broken or ill fitting plates, crowns, bridges, and fillings projecting into the gum or irritating the cheek, lips, or tongue!

More than fifty per cent. of all cancerous growths are found in the stomach or intestines. How frequently these occur coincidentally with a disorganized masticatory apparatus! A masticatory apparatus which prepares imperfectly for digestion, food—particularly meat and starchy food. Impaction occurs at the pyloric end of the stomach and this perverted digestion, imperfect digestion, and the irritant and poisons that arise therefrom result in disorganization and breaking down.

How frequently cancer occurs on the site of a gastric ulcer, and how frequently dentists and physicians have noted the clearing up of gastric ulcer after the correction of a faulty masticatory apparatus and the institution of proper hygienic conditions in the mouth!

The dentist occupies a preëminent position in preventing and detecting many of these precancerous conditions, and the physician may well seek and benefit by the hearty coöperation of the dentist. Whether the teeth contribute to this malady or not, the patient has an infinitely better chance to have at least comfort with a clean and efficient chewing apparatus.

Septic gastritis, appendicitis, colitis, arthritis, rheumatic fever, endocarditis, toxic neuritis, nephritis, tuberculosis, measles, scarlet fever, diphtheria, and other diseases due to an infection or intoxication, are commonly found associated with a septic oral cavity.

The microorganisms and their toxins found in the discharges of diseased teeth, diseased gums, and the pathological processes set up by unhygienic artificial substitutes, crowns, and fillings, may be absorbed from the oral cavity, taken into the stomach, or drawn into the lungs.

While the activity of these microorganisms is kept within normal bounds by the defenses of the body, yet their resistance may be overcome when the doses become sufficiently large, or the virulence of these microorganisms is increased, or when other more dangerous microorganisms are introduced, or when from other causes the resistance is sufficiently lowered to allow them to gain a foothold.

When absorption of these microorganisms from a septic mouth extends over a long period, they may produce their effect by subinfection. In this way may be explained many forms of chronic fibrous degeneration, which occur so insidiously in the various organs of the body as suggested by Adami.

On the other hand, the menace of septic teeth is strikingly dangerous when it is realized that frequently *Streptococcus viridans* is found in, around, or on the ends of these septic teeth or in their infected sockets. It is well known that when the defenses of the body are so lowered as to allow these microorganisms to gain entrance to the blood, the result is fatal within a year! The dentist may render a great service in discovering and doing away with foci of infection which baffle skill.

While the eradication of these foci of infection and the reorganization of the mouth may not cure the systemic or organic disturbances as frequently as the dentist anticipates, the coöperation of the dentist in these cases is sufficiently valuable to make possible the efforts of the internist.

Take into consideration the obscure yet numerous neuralgias and tics, about the head and jaws, the reflected pains, twitches, spasms in the ears, eyes, nose, and other parts of the body, the insomnias, melancholias, and seizures simulating epilepsy and insanity which have been relieved and frequently cured when the dentist has discovered persistent irritation in or about the teeth and jaws or removed impacted teeth and hidden roots and unhygienic and irritating crowns, bridgework, plates, and fillings, and corrected warped and contracted dental arches.

All of these conditions and those previously mentioned are found so frequently associated with a septic or disorganized dental apparatus and have been relieved or cured by the correction of them, that it should be the proper order of things for the physician to insist, when called for treatment or consultation, that the teeth and mouth be put in a thoroughly sanitary condition and kept so, and that a search be made with the X-ray by the dentist for hidden sources of infection or irritation, and then their eradication insisted upon.





BOOK REVIEWS

THE REPORT ON ODONTOMES. By the Committee appointed by the British Dental Association, Douglas P. Gabell, L. R. C. P., M. R. C. S., L. D. S., W. Warwick James, L. R. C. P., F. R. C. S., L. D. S. J. Lewin Payne, L. R. C. P., M. R. C. S., L. D. S. Published by the British Dental Association, 19 Hanover Square, London, W. Printed by John Bale, Sons & Danielsson, Ltd., Great Titchfield St., Oxford St., W. Price: 7s. 6d. net; 135 pages; nearly 100 illustrations on art plates.

The report upon odontomes has been written at the request of the Board of the British Dental Association, who desired the Museum Committee of the Annual Meeting, held in London in 1906, to prepare an extended and illustrated edition of the catalogue which was rapidly compiled for use at the meeting. The classification of Sir John Bland-Sutton was adopted as a basis for the arrangement of the specimens in the museum.

The result of this work has been the presentation of a most valuable book, the text of which covers 135 pages. In the book the odontomes are classified as follows:

1. *Epithelial Odontomes*.—Where the abnormal development takes place in the dental epithelial alone—Multilocular Cysts. Dentigerous Cysts. Dental Cysts.
2. *Composite Odontomes*.—Where the abnormal development takes place primarily in the dental epithelium, and secondarily in the dental papilla, and may occur in the follicle also.—Complex Composite Odontomes. Compound Composite Odontomes.
3. *Connective Tissue Odontomes*. Where the abnormal development takes place in the dental tissues of mesoblastic origin alone—Fibrous Odontomes. Cementomes. The term “connective tissue odontome” has been introduced to include odontomes of mesoblastic origin. The work certainly reflects great credit on the members of The British Dental Association.

THE MODEL T. FORD CAR—ITS CONSTRUCTION, OPERATION AND REPAIR.

By VICTOR W. PAGE, author of “The Modern Gasolene Automobile.”
The Norman W. Henley Publishing Co., New York City. Price \$1.00.

This is a practical instruction book on the Ford Car. A high grade cloth bound book printed on the best paper, illustrated with specially

made drawings and photographs. All parts of the Ford Model T Car are described and illustrated in a comprehensive manner. Complete instructions for *driving* and *repairing* are given and every detail is treated.

This book is written specially for Ford drivers and owners, by a recognized automobile engineering authority and an expert on the Ford, who has driven and repaired Ford Cars for a number of years. He writes for the average man in a practical way from actual knowledge.

PRACTICAL ORAL HYGIENE, PROPHYLAXIS, and PYORRHEA ALVEOLARIS.

By ROBIN ADAIR, B. S., M. D., D. D. S., Professor Oral Prophylaxis and Pyorrhea, Southern Dental College, Atlanta, Ga. 2nd edition, enlarged and revised. 1915. 462 pages. 100 illustrations. Price, \$5.00.

The new edition is a decided improvement over the first, as the author has evidently gone carefully over the text matter and corrected the typographical errors.

Practitioners who desire to do prophylactic work would do well to procure this book. The author has put his best into this volume and a new edition called for so soon is a good sign of the value of the work.

SOCIETY NOTES

ARIZONA.

The Arizona Board of Dental Examiners will hold its next meeting at Phoenix, Ariz., on October 4, 1915.—J. HARVEY BLAIN, Prescott, Ariz., *Secretary*.

ILLINOIS.

The Northern Illinois Dental Society will hold its annual meeting at Freeport, Ill., October 20-21, 1915.—F. H. BOWERS, *Secretary*.

INDIANA.

The Northern Indiana Dental Society will hold its next meeting October 7-8, 1915, at Bluffton, Ind.—F. A. WILDASON, *Secretary*.

MAINE.

The Maine Board of Dental Examiners will hold an examination at the State House, Augusta, Maine, October 21, 1915.—I. E. PENDLETON, 54 Pine St., Lewiston, Me., *Secretary*.

MASSACHUSETTS.

The next meeting of the Northeastern Dental Association will take place at Springfield, Mass., October 13-15, 1915.—ALVIN A. HUNT, *Secretary*.

MICHIGAN.

The Michigan State Board of Dental Examiners will meet at Ann Arbor, Mich., November 1-6, 1915.—A. W. HAIDLE, Negaunee, Mich., *Secretary*.

NEW JERSEY.

The next meeting of the State Board of Registration and Examination in Dentistry will be held at the State House, Trenton, N. J., December 6-9, 1915.—JOHN C. FORSYTH, *Secretary*.

NEW YORK.

The Union meeting of the 5th, 6th, 7th, and 8th District Dental Societies will meet November 11-13, 1915, at Onondaga Hotel, Syracuse, N. Y.—A. C. BICKELHAUT, 515 Kirk Building, Syracuse, N. Y., *Chairman Exhibit Committee*.

OHIO.

The next meeting of the Ohio State Dental Society will be held at Columbus, Ohio, December 7-9, 1915.—F. R. CHAPMAN, *Secretary*.

PENNSYLVANIA.

The Fourth Annual meeting of the Lebanon Valley Dental Society will take place at Lebanon, Pa., October 12-13, 1915.—E. P. KREMER, *Chairman Exhibit Committee*.

VIRGINIA.

The Virginia State Dental Association will hold its next meeting at Richmond, Va., at Jefferson Hotel, November 4-6, 1915.—C. B. GIFFORD, Norfolk, Va., *Secretary*.

ADVANCE NOTICE

At the meeting of the State Board of Registration and Examination in Dentistry to be held at the State House, Trenton, N. J., December 6, 7, 8, and 9, 1915, the following practical tests will be required: Insertion of an approximal gold filling, compound approximal amalgam filling, and a silicate filling, besides a practical test of the applicant's ability in oral prophylaxis. Also preparation of a cavity for an inlay with wax pattern. Prosthetic Dentistry. Five-piece bridge and Richmond crown in addition to an Anatomical Articulation of a full upper and lower set of teeth. Teeth to be furnished by applicant. Wax bites properly trimmed, and in place on models for inspection before setting up teeth.

In addition, Dental Jurisprudence and Bacteriology will be added to the theoretical examination.

JOHN C. FORSYTH, Acting Secretary.

NOTICE OF REGISTRATION**TO ALL DENTISTS LICENSED IN THE STATE OF ILLINOIS**

You are hereby notified to procure from O. H. Seifert, Secretary of the Illinois State Board of Dental Examiners, with offices located at 305-6-7 Ridgely Bldg., Springfield, Ill., a renewal of your certificate of registration to practise Dentistry in the State of Illinois from and after November 1, 1915 and until November 1, 1917, and that the fee therefore is \$1.00 (One Dollar), which must accompany the application for renewal.

You are further notified that unless you procure a renewal of your registration certificate on or before November 1, 1915, your license to practice dentistry in the State of Illinois will be revoked in accordance with the statute in such cases made and provided.

ILLINOIS STATE BOARD OF DENTAL EXAMINERS,
O. H. SEIFERT, Secretary.

INFORMATION FOR THOSE DESIRING TO ENTER THE DENTAL CORPS OF UNITED STATES NAVY

A candidate for appointment to the Dental Corps of the Navy as acting assistant dental surgeon must be a citizen of the United States, between 24 and 32 years of age, a graduate of a standard medical or dental college, trained in the several branches of dentistry, of good moral character, and of unquestionable professional repute.

Should an assistant dental surgeon, Dental Reserve Corps, desire to enter the Dental Corps, he must be between 22 and 30 years of age, a graduate of a reputable school of medicine or dentistry, of good moral character, and of unquestionable professional repute. In accordance with law, however, prior to being commissioned an assistant dental surgeon in the Dental Corps he must serve three years as an acting assistant dental surgeon.

Successful candidates are first appointed acting assistant dental surgeons, and after serving a probationary period of three years are ordered before an examining board to determine their fitness for commission as assistant dental surgeons, United States Navy.

Application should be made to the Chief of the Bureau of Navigation, Washington, D. C., via the Surgeon General, United States Navy, and according to the form prescribed. This application must be in the handwriting of the candidate and must be accompanied by the following certificates:

(a) Letters or certificates from two or more persons of good repute, testifying from personal knowledge to good habits and moral character.

(b) A certificate to the effect that the applicant is a citizen of the United States.

(c) Certificate of preliminary education. The candidate must submit a certificate of graduation from an accepted high school or an acceptable equivalent.

(d) Certificate of dental education. This certificate should give the name of the school and the date of graduation.

(e) If the candidate has had special educational or professional advantages, certificates to this effect, signed by the proper authorities, should also be forwarded.

The applicant will save unnecessary correspondence if he will make sure when submitting his application that the qualifications enumerated above are clearly and plainly described in his letters or certificates.

The form of application is as follows and must be in the applicant's handwriting.

....., 191

SIR: I request permission to be examined for an appointment as acting assistant dental surgeon in the United States Navy. I was born at, and was years of age on the day of 191..; am a citizen of the United States, residing in, county of, in the State of I am a graduate of dental (medical) school, in the State of, and was licensed to practice dentistry in the State of in

I forward herewith letters testifying to my moral character, habits, citizenship, preliminary education, professional education, and qualifications.

Very respectfully,

The CHIEF OF THE BUREAU OF NAVIGATION,

Navy Department, Washington, D. C. (via The Surgeon General United States Navy).

A candidate whose qualifications are satisfactory will receive a formal permit to present himself for examination.

PAY AND ALLOWANCE TABLE

Length of service	Pay per annum on shore	Allowances per annum for quarters	Total pay and allowances per annum on shore	Pay per annum at sea
First five years' service . . .	\$2,000	\$432	\$2,432	\$2,200
After five years' service . . .	2,200	432	2,632	2,420
After ten years' service . . .	2,400	432	2,832	2,640
After fifteen years' service . .	2,600	432	3,032	2,860
After twenty years' service . .	2,800	432	3,232	3,080

A limited number of acting assistant dental surgeons are authorized by law for temporary appointment when their services are required. Their pay and allowances are the same as those of acting assistant dental surgeons in the regular service. The law provides that these temporary appointments may be revoked at any time, shall have no legal force or effect except for the time the temporary appointee is in active service, and shall include no right to

retirement. The requirements for appointment are similar in general to those outlined above. Application for permission to take the examination should be addressed to the Chief of the Bureau of Navigation, Navy Department, Washington, D. C., via the Surgeon General, following the form given above.

For further information address the Surgeon General, United States Navy, Navy Department, Washington, D. C.

FUTURE EVENTS

- October 7-8, 1915.—Northern Indiana Dental Society, Bluffton, Ind.—C. A. VAN KIRK, Kendallville, Ind., *Chairman Ex. Committee*, F. A. WILDASON, *Secretary*.
- October 12-13, 1915.—40th Annual Meeting of the Lebanon Valley Dental Society, Lebanon, Pa.—E. P. KREMER, *Chairman Exhibit Committee*.
- October 13-15, 1915.—Northeastern Dental Association, Springfield, Mass.—ALVIN A. HUNT, *Secretary*.
- October 20-21, 1915.—Northern Illinois Dental Society, Annual Meeting, Freeport.—F. H. BOWERS, *Secretary*.
- October 19-22, 1915.—Dental Manufacturers' Club Exhibit, Waldorf-Astoria, New York City, N. Y.
- October 21-23, 1915.—Maine Board of Dental Examiners, State House, Augusta, Maine.—J. E. PENDLETON, 54 Pine St., Lewiston, Me., *Secretary*.
- November 1-6, 1915.—Michigan State Board of Dental Examiners, Ann Arbor, Mich.—A. W. HAIDLE, Negaunee, Mich., *Secretary*.
- November 4-6, 1915.—Virginia State Dental Association, Jefferson Hotel, Richmond.—C. B. GIFFORD, Norfolk, Va., *Secretary*.
- November 9-11, 1915—The Rhode Island Board of Dental Examiners.—W. B. ROGERS, *Secretary*.
- November 11-13, 1915.—Union meeting of the 5th, 6th, 7th, and 8th District Dental Societies at the Onondaga Hotel, Syracuse, N. Y.—A. C. BICKELHAUT, 515 Kirk Building, Syracuse, N. Y., *Chairman Ex. Committee*.
- December 6-9, 1915.—State Board of Registration and Examination in Dentistry, State House, Trenton, N. J.—JOHN C. FORSYTH, *Secretary*.
- December 7-9, 1915.—Ohio State Dental Society, Columbus, O.—F. R. CHAPMAN, *Secretary*.
- January 25-27, 1916.—American Institute of Dental Teachers, Minneapolis, Minn.—J. F. BIDDLE, *Secretary-Treasurer*.
- April 14-16, 1916.—West Virginia State Dental Association, Kanawha Hotel, Charleston, W. Va.
- May, 1916.—Indiana State Dental Association, Claypool Hotel, Indianapolis, Ind.—A. R. ROSS, *Secretary*.
- June, 1916.—Florida State Dental Society, Orlando, Fla.—M. C. IZLAR, *Corresponding Secretary*.

A DAY

BY McLANDBURGH WILSON

A day came up in the eastern hills,
An ignorant bright young day,
To deal with men for a fleeting time
And speed them upon their way.
And over the cloudless, tender sky
A rosiness faintly flushed;
The day was ready, and as it came
It knew so little it blushed.

The day went down in the western hills,
A terribly wise old day,
That dealt with men for a fleeting time,
And sped them upon their way.
And over the clouded, fading sky
A surging of crimson rushed;
The day was finished, and as it went
It knew so much that it blushed.

—*New York Times, (Magazine Section), Sept. 11, 1915.*